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**PROBLEMS AND SOLUTIONS
IN FUTURE
COALITION OPERATIONS**

Edited by
Thomas J. Marshall
with
Phillip Kaiser
and
Jon Kessmeire

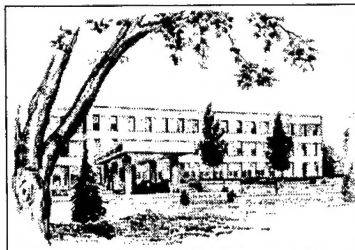
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CONTENTS

Acknowledgments.....	v
Foreword.....	vii
1. Historical and Cultural Influences on Coalition Operations <i>Steve Bowman</i>	1
2. Command in Coalition Operations <i>Thomas Durell-Young</i>	23
3. The Effect of Technological Asymmetry on Coalition Operations <i>Steven Metz</i>	49
4. Doctrine and Training: The Foundation of Effective Coalition Operations <i>Michael Smith</i>	69
Participants—1996 USAREUR Workshop “Problems and Solutions in Future Coalition Operations”.....	79
Contributors	89

CHARTS

1. Definitions of NATO Command Authorities 27
2. Comparison of NATO Command Authorities 28
3. Comparison of NATO and U.S. Command
Authority Definitions. 30
4. "OPCON" Compared. 31

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FOREWORD

Each year, the United States Army, Europe (USAREUR) undertakes a conference-study program on a matter of strategic significance, with several objectives. The topic relates to USAREUR's mission; anticipates future requirements; contributes toward building democratic norms within the militaries of emerging democracies; and serves to inform the USAREUR staff, higher headquarters and other U.S. Government agencies of active measures to improve current practices. Examples of topics in the last several years are Preventive Diplomacy, Planning and Conducting Large Scale Emergency Operations, and Military Support to Democratization in Europe.

In 1996, USAREUR undertook to study "Problems and Solutions in Future Coalition Operations." That topic was germane not only because of the U.S. Government's participation in several current coalitions, but also because USAREUR will continue to be in the vanguard, participating in a wide variety of multinational operations. While coalitions may be a way of life for most militaries, changes in the geostrategic environment over the past several years have created new challenges and opportunities for U.S. participation. Protecting the Kurds in Iraq after the Gulf War, supporting humanitarian relief operations in Rwanda, deploying a preventive diplomacy force to the Former Yugoslav Republic of Macedonia to guard against a spillover of the Balkan conflict, and providing forces to support the implementation of the Dayton Accords for Bosnia have tested the United States' ability to work with new partners, in support of new missions, in unfamiliar parts of the world.

There are important similarities and differences between these new coalition operations, and large military operations and bygone NATO plans for operations in Europe against the Warsaw Pact. In fact, some of the former Warsaw Pact states are now partners in coalitions with the United States. Other countries from Africa and Asia Minor have participated as well. These new partners

have not only not trained together, but often have very different military traditions and cultures.

Another new issue is the activity of nonmilitary and nongovernmental actors in the area of coalition operations. Civil organizations including large engineering firms brought into contract support services and private volunteer organizations implementing a variety of programs may impact on coalition operations. Media organizations are active and unfettered, which would not be the case in large-scale military operations. Furthermore, rather than being under the direction of a strong lead nation or existing alliance, some operations may be mandated by an international organization such as the United Nations, with an *ad hoc* command structure subordinated to a regional organization.

Although similarities exist between new coalition operations and large scale military operations, many factors have a stronger influence in a coalition situation. Differences in languages, terminology, military doctrine, equipment, capabilities, and command organization may all have been present in previous operations, but may be exacerbated by the level of interaction among units and limited preparation time available to most coalitions.

The 1996 USAREUR program addressed coalition operations at the lower end of the spectrum of conflict, as well as typical peacekeeping and humanitarian assistance operations. The program was not designed to address large-scale combat intensive military operations on the order of a Desert Shield/Desert Storm. While some of the findings and recommendations from this study apply to larger operations, the focus was on improving lower level operations which are becoming more frequent, have a higher probability for confusion and misunderstanding, less planning time, and a myriad of participants in addition to the military.

There were two stages to the program. The first stage consisted of two workshops. One workshop drew participants from Eastern Europe, Russia, Georgia, and

Ukraine; the second from Africa (see List of Participants). The overall purpose of the workshops was to define the problems in future coalition operations, drawing from the experience of recent and potential future participants. Each workshop had the same core group of facilitators and Western European attendees. Six topics were addressed at the workshops, each facilitated by a U.S. military expert in that area. The topics were: history and culture; forces and organization; technology; training and doctrine; logistics and resources; and command and control. While the topics themselves are important, the selection of the six distinct topics was a device for organizing the effort and does not imply separation in practice. In fact, many of the areas overlapped and are interrelated. For that reason, the authors have selected four areas to report on, subsuming forces and logistics within the context of the overall discussion. For each of these topic areas a "guidelines" paper was prepared as a read-ahead that laid out the issues to be addressed and what product the workshops should produce. The results of the workshops were used to frame issues and propose possible solutions, presented at stage two of the program—a high-level multinational conference at Headquarters, U.S. Army Europe, in Heidelberg, Germany. Following the Heidelberg conference a report of findings and recommendations for improving future operations was widely disseminated.

This book reports in greater depth on four significant aspects of coalition operations: historical and cultural influences, command, technology, and doctrine and training. Steve Bowman identifies points of friction caused by historical and cultural differences among forces, and how they influence the decision to join a coalition, agreement on goals, and organization of operations, among other things. Some of the challenges are logistical problems caused by religious and cultural requirements, equipment availability, and the capability of various forces. Language and terminology differences can cause miscommunications and negatively affect operations. An example related to many types of peace operations is the role to be played by police forces as opposed to military forces. Military forces should

not be used for missions outside their normal operations. It may be necessary to integrate the police forces of participating states into the coalition, or engage the police of the host nation. How effectively this is accomplished depends on an appreciation by the lead nation commander of the recipient nation's culture and experience.

Command and control issues will continue to dominate the formation and operation of future coalitions. Thomas-Durell Young discusses the difficulty of establishing unity of command and suggests that the best that planners may presume a leader will achieve is unity of effort. Nations are reluctant to place their forces under foreign command, and will seek to retain the greatest amount of control over them as possible. This may pose severe problems if the situation escalates in intensity, requiring additional leadership authority during an operation. Young also addresses three models for command and control — lead nation, parallel, and integrated command — and the difficult task of transfer of authority. One clear finding that could be addressed today, within NATO, is the lack of common definitions and graphics among potential coalition partners.

Asymmetries in technology among coalition partners pose the greatest threat to cohesion and effectiveness during combat operations. Steven Metz examines many issues of asymmetry, including different degrees of reliance on technology, utilization of different forms of technology, and using it for different purposes. Interoperability of communications equipment is one specific example noted by the author. The rapid development of commercial technology offers the means to standardize communications among disparate partners, given the willingness of the more advanced states to share such technology.

Military doctrine is so closely associated with national traditions there is little hope of standardization among partners in a coalition. Avoiding the trap of attempting to force one's doctrine on a coalition, commanders should concentrate on seeking agreement on general administrative and operational principles for the given occasion. Michael Smith suggests preparing regional

doctrinal considerations that take into account national differences and provide a template that can be customized for a specific operation. Likewise, dictionaries could be prepared that would provide common understanding of terminology. Permanent institutions for regional information exchange and training would help develop trust among potential coalition members that would pay off when a crisis requiring quick coalition formation occurs.

Generally speaking, analyzing the obstacles, and preparing, planning, and training to address them, will mitigate their effects on coalition operations. Developing common operating principles and institutionalizing coalition training will improve the likelihood of success.

The authors express their appreciation to the U.S. Army War College for undertaking to publish this modest effort to understand an issue that is likely to be of increasing importance to U.S. military forces in the foreseeable future.

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CHAPTER 1

HISTORICAL AND CULTURAL INFLUENCES ON COALITION OPERATIONS

Steve Bowman

SETTING THE CONTEXT

Coalitions have been part of warfare since the earliest times. Both Troy and the Greeks had their own coalitions during the Trojan War. The wars of Alexander the Great versus the Persians were likewise coalitions on both sides. Frederick the Great's European wars included three different coalitions—with countries changing partners in the various coalitions. The Napoleonic wars eventually had seven different coalitions, which continually changed with the fortunes of war. The last coalition had 14 nations working together to defeat Napoleon. All of the United States' overseas wars have been fought as part of a coalition, except the Spanish-American War.

Before the 20th century, coalitions usually formed on a transitory basis to fight a war, then were disbanded. The current century has seen the development of long-term alliances in peacetime, as well as short-term coalitions in times of war. All major wars in the 20th century have been coalition wars except for the Russo-Japanese and Iran-Iraq wars. In the last major conflict, the 1990-91 Persian Gulf War, a coalition of 37 diverse nations pulled together to accomplish common goals, then disbanded once again.

Historically, the main reason coalitions have formed has been to overcome a common threat or situation that an individual nation could not face alone. Fear often has been the driving factor holding a coalition together. To defeat the common threat coalition members usually have had to give up some prerogatives of independence for the good of the whole. When the threat is severe, nations have given up

more sovereignty. When the threat has receded, individual political goals often have changed within the coalition.

This chapter will address some of the major points of friction historically affecting coalitions. Examples are primarily taken from the wars of the 20th century. The intent is to allow the reader to understand that there are numerous friction points in coalition operations that are common to nearly all coalitions.

HISTORICAL POINTS OF FRICTION

Goals.

The first friction point is *goals*. A common goal or goals must be an overriding interest for a nation to join a coalition. The more serious the threat, the easier for a nation to sacrifice some national goals for common ones. Political goals must drive military goals—and must be agreed upon before execution of coalition operations begins. Reaching agreement on goals and the means to achieve them is often difficult. During World War II, the United States and Great Britain agreed on the goal of overthrowing Nazi Germany. However, the United States wanted a direct assault into the European continent to accomplish this; the British wanted to go through the “soft underbelly” of the Balkan area—common goals, differing means of attaining them.

Goals also change over time within a coalition, as political and military situations change. Smaller coalition partners often feel bullied and under-appreciated by the larger power(s), which tend to take control of the coalition. This is to be expected in coalition operations. Bismarck made this point when he stated that there always must be a rider to direct the horse. At the same time larger coalition partners may feel they carry inequitable risks and burdens, both in number of casualties and amount of national treasure spent in the coalition effort.

Logistics.

After common goals, *logistics* is probably the most important, and difficult, single friction point in modern coalition operations. As shown in World War II, logistical problems can affect the strategic direction of a coalition operation. For example, the Allied invasion of southern France had to be postponed because, logistically, there were not enough landing craft available to support the landings when they were originally planned. Generally speaking, no two nations have the same logistical or administrative doctrine. Larger coalition partners often must support smaller allies, causing significant strains on resources.

Logistics also must be considered from a coalition perspective, not a national perspective. Planners must ensure that national military forces within the coalition do not compete with each other for scarce supplies within the area in which the coalition is operating, driving up prices and denying the resources to the local population.

Capabilities.

Another friction point is *capabilities*. Within any given coalition, allied partners are not equally capable. Coalition leadership must be sensitive to this and give individual coalition forces missions they are able to accomplish successfully. Understanding that all nations in the coalition do not have the same capabilities, the various coalition partners can then share the burdens of the coalition equitably—not equally—as each nation contributes what it can to accomplish the coalition mission.

Training.

Training is the glue which holds a military force together. However, training levels vary in different armies within a coalition, and represent a fourth point of friction. Resources and standards for training are widely divergent. In some cases, as in Desert Storm, circumstances may allow forces to train before commencement of actual operations,

bringing the various national forces closer to a common level of training. Those forces which are trained to different or lesser standards must be used within the limits of their training state. For combat forces, it is better to train to a tough, high intensity standard, than "train down" to a lesser combat ready standard for units designated for coalition peace support operations. This standard should be used instead of training to a "peace support level" and having to build up to a higher combat level if the situation changes, or if a new crisis requires re-employment of combat forces elsewhere. It is a coalition leadership problem to assign missions appropriately and diplomatically.

Equipment.

Equipment quality, quantity and interoperability are significant challenges for coalitions, with interoperability being the most significant single factor that may cause friction. Planners must exploit interoperability where it exists and make allowances where it does not. As an example of the problems of mixing types of equipment, planners must ensure that former Soviet-equipped units do not operate adjacent to western-equipped units. The danger of fratricide from instinctive training reaction on the part of troops under the stress of combat could be disastrous. Communications equipment interoperability is another significant problem for modern coalitions. Unequal communications capabilities may require lead nations to compose specialized communications units for multinational operations. Where severe interoperability problems exist, the coalition commander may choose to employ geographically separate zones for national forces in order to lessen the impact of the interoperability gap.

Even such basic equipment as footwear must be analyzed for coalition operations. "Standard" footwear for all UN forces was furnished by the United States to the various contingents during the Korean war. However, Turks needed extra wide boots, while Asian personnel required boots that were extra narrow and short. Boots

developed for U.S. feet simply did not fit other members of the coalition.

Doctrines.

Historically, coalition leaders have had to consider the impact of differing *doctrines* within the coalition. Doctrine reflects national character and determines force structure and procedures. Understanding and adjusting for the differences in national doctrines are required. Some differences can be overcome through training exercises. Liaison officers with exceptional skills also can help overcome doctrinal friction within the coalition forces. The German army in World War II was highly successful in using such liaison teams to ensure smooth operations with non-German units. The Desert Shield training is another example of how national armies learned more about how to operate with other forces. The use of the Combat Maneuver Training Center, in Hohenfels, Germany, to help train units in current doctrine for peacekeeping or peace enforcement operations is another example of how multinational units can learn common doctrinal procedures. Coalition leaders must understand that some coalition forces may have to be assigned special missions or be augmented from other national forces because of significant doctrinal differences.

Intelligence.

Another factor that must be considered is *intelligence*. Sharing intelligence is always a sensitive issue, involving national collection rules that make full sharing extremely difficult. Although this can severely test coalition leadership, strong coalitions can make it work. The best historical example of this is the sharing of the ULTRA data in World War II.

The historical and cultural differences between nations within the coalition and in the country to which the force will be deployed must be part of the Intelligence Preparation of the Operation which will be used by *all*

planning staffs, at the coalition and national levels, logistic as well as tactical staffs.

Language.

From the earliest coalition operations, *language* problems have remained a constant point of friction. Lack of understanding in day-to-day operations can equate to disastrous miscommunications in combat actions. Most analysts agree that English should be the common language of future coalitions. All coalition partners must thus improve language capabilities at key levels within their military forces, although not necessarily at all levels. One of the problems already being encountered by several Eastern European armies is that young officers are learning English so well that they are being hired away from the military and into the civilian sector. Many English speakers from Eastern Europe have no, or very limited, troop and field experience. Highly experienced older officers speak Russian, not English.

While English appears to be the common language of future coalitions, consideration of a second language, Russian or French for example, could greatly improve communications for some future coalition operations. Virtually all senior leaders in Eastern European armies speak and understand Russian. In some coalition operations, there may be a conscious choice, because of the composition of the coalition force, to make Russian the primary common language, with English as a secondary common language. English-speaking nations must be prepared with sufficient language-qualified personnel to react to such requirements. A similar situation could be true for a coalition made up mostly of African nations. A large number of African militaries educate their officers using the French language. There may be situations where French is the designated primary language for the coalition. As a minimum, there will be situations where Russian or French, or another language, will be used as a second common language for certain coalition operations. Each situation should be evaluated on its own merits, with

consideration of forces available as a critical factor in determining the language or languages that should be common to the coalition.

Linguists alone cannot overcome the problem. Trained liaison teams knowledgeable in military terminology and doctrine, as well as in the language are important for success. Such teams can greatly assist with understanding of such concepts as "commander's intent" that may be unclear to personnel with English as a second language. Developing these skills is expensive and difficult; however, it is nothing compared to the cost of not having those personnel at a critical moment.

Lack of common terminology is another type of language problem that hampers effective coalition operations during both preparations for and conduct of military operations of all types. Acronyms and extensive use of abbreviations create a special problem for military forces joining a coalition. In a crisis situation, language and terminology disconnects could mean the difference between success and failure. Coalition operations may require orders to be developed with a full and accurate description of tasks to be accomplished, instead of working for brevity as is the case in most NATO operations—and certainly is the case for U.S. operations orders.

Leadership.

Another common historical friction point in coalitions is *leadership*. General Eisenhower discussed the difficulties of coalition leadership in a memorandum to Lord Louis Mountbatten, who had been designated Supreme Allied Commander, Southeast Asia, in 1943. Some of his thoughts are important to coalition leaders in the modern world.

The **written** basis for allied unity of command is found in directives issued by the Combined Chiefs of Staff. The **true** basis lies in the earnest cooperation of the senior officers assigned to an allied theater. Since cooperation, in turn, implies such things as selflessness, devotion to a common cause, generosity in attitude, and mutual confidence, it is easy

to see that **actual** unity in an allied command depends directly upon the **individuals** in the field. . . . It will never be possible to say the problem of establishing unity in any allied command is ever completely solved. This problem involves the **human equation** and must be met day by day. **Patience, tolerance, frankness, absolute honesty in all dealings, particularly with all persons of the opposite nationality, and firmness, are absolutely essential.** [emphasis added] ". . . never permit any problem to be approached in your staff on the basis of national interest."¹ [emphasis in original]

The requirements for leading a coalition are far more difficult than leading a national force. Coalition politics override coalition military logic—a factor future coalition leaders must clearly understand. Coalition leadership must be persuasive, not coercive, and sensitive to national needs. Future coalitions will require new Eisenhowers, Schwarzkopfs, or Khalids. National forces, especially in potential lead nations, must consider how to develop such leadership traits in future military leaders.

A coalition commander usually will not have unity of command. The best that usually can be hoped for is unity of effort within the command. If unity of command is not possible, however, at least a clear chain of command is an absolute necessity. Common rules of engagement and a single controller for airspace are also necessary common principles. The coalition commander must anticipate and plan for national vetoes of controversial or culturally divergent plans or operational concepts. In some cases, the coalition may opt not to accept forces from a nation which could be expected to severely limit the power of the coalition commander over its forces.

Coalition leadership can be in a number of forms. The ideal command would be an integrated standing command. However, the *ad hoc* nature of most coalitions will mean that a lead nation approach will probably be the best that can be anticipated. At times, a parallel command structure may be the best that can be achieved, as occurred during Operation Desert Shield/Desert Storm. Whatever the command arrangement, the coalition commander must be

responsible for coordinating all military infrastructure within the theater of operations. The presence of civilian groups, NGOs and PVOs, will make the coordination requirements even greater and may require co-location of the civilian "command group" with the military commander. As the level of intensity of operations gets higher, the command authority required by the coalition commander gets greater. Prudent planning should always consider the requirement to escalate the level of intensity as dictated by the situation.

CULTURAL DIFFERENCES AS POINTS OF FRICTION

Another major area of potential friction for future coalitions comes from *cultural differences*. Again, these are not new problems but have existed in coalitions throughout history. Each member of a coalition has its own culture that is different—to a greater or lesser extent—from any other nation. These differences—in religion, class, tolerance, work ethic, standards of living, and national tradition—must be considered and planned for in future coalitions.

Religion.

A coalition may consist of a great variety of religions: Protestant, Catholic, Orthodox Christian, Islam, Buddhism, Judaism, Hindu, and others. Each may have special requirements that must be considered when planning coalition operations, including religious holidays and festivals and different types of food which may or may not be consumed. Planners should consider what would have happened to the coalition formed against Saddam Hussein in 1990 if Israel had decided to join the war effort against Iraq.

Another example of religious requirements relates to the Greek contingent in the UN coalition in Korea. The Greeks required live lambs for a religious rite. U.S. Quartermaster personnel made great efforts to comply with this unusual request. However, they did not understand that Greek

culture for this rite required all lambs to be female. Thus the Greeks felt slighted for the insensitivity to their religion—and the Americans felt unappreciated for the prodigious efforts they expended just to get any kind of lambs to the Greek troops.

In the same vein, Muslims could not eat pork and Hindus could not eat beef. In addition to religious requirements, cultural traditions may also lead to dietary demands. For example, in the coalition in Korea, Asians wanted more rice, and Europeans wanted more bread.

Class and Gender Distinctions.

Other cultural differences involve class and gender distinctions. U.S. officer/soldier distinctions are not nearly as great or as strictly enforced as many armies of the world. Regarding gender issues, women make up nearly 20 percent of the American Army, yet are not even allowed to serve in the armed services of many other nations. Planners must assess what impact these issues may have on a coalition and how such distinctions may be incorporated into coalition planning.

Discipline and Cultural Tolerance.

Levels of discipline and cultural tolerance vary greatly between armies. Some armies may not be able to work next to each other. Planners must determine which forces can relieve each other during coalition operations, and which ones must be kept apart.

Work Ethic.

The work ethic is another cultural factor that varies widely between nations. Although one nation's army has a different work ethic than another, it will not necessarily be superior or inferior. However, the difference may complicate cooperative efforts.

Standards of Living.

Standards of living are another cultural factor that can have an impact on future coalitions. A great number of possible coalition partners for the United States would probably consider U.S. soldiers to have a wastefully "rich" standard of living, even in field operations. Yet American soldiers generally operate under much poorer standards than their U.S. civilian counterparts—the society from which they come. So, relatively, U.S. soldiers do not consider themselves to be pampered, even if the cultures of some other nations may think U.S. troops live too well.

National Traditions.

One more example of cultural differences has to do with national traditions. For example, casualties are a major area of concern to the United States. A relatively small number of casualties caused the U.S. military to withdraw from Lebanon in 1983 after the bombing of the Marine barracks. There was a similar reaction to casualties in Somalia in 1993. Planners and policymakers must take into consideration that the U.S. Congress and public are very sensitive to this issue, even though to other cultures such reactions may be difficult to understand.

In the Korean War, the large coalition of nations fighting produced several examples of cultural misunderstandings. For instance, Abyssinian troops came to Korea with whatever weapon they had when called into service. The U.S. Army then issued them all new American-made weapons. No one in the U.S. Army understood that the Ethiopian culture required a warrior to return home with the same weapon he departed with—not to do so was an indicator of personal defeat.

In dealing with problems of various cultures, it is important to remember that "different" has nothing to do with "better" or "worse." Avoiding such value judgements will require both education and training. The more personnel available who are experienced in the cultures of

various coalition partners, the smoother the operations of the coalition are likely to be. Yet maintaining such qualifications is very difficult, especially during periods of tight budgetary restrictions.

The importance of understanding the language and culture of the nation in which the coalition is operating cannot be ignored. In some cases, such preparation may be as important as ensuring a common language among the coalition partners. It is critical that committed military forces adopt the local language as soon as possible in order to conduct day-to-day operations. This is particularly true for forces who will be in daily contact with the local population. If local translators are used, as they certainly will be in many cases, lower level leaders must clearly understand that these translators know little or nothing about military terminology or doctrine. Extreme care must be taken to ensure that accurate information is exchanged with the local population.

Other examples of cultural differences came to light during the Gulf War in 1990. The British and French, traditional world powers, needed to be given "major power" status in the operations for political reasons, even though they had relatively small forces in the theater. Because French law prohibited conscripts from being forced to serve outside of France, the French units had less manpower than expected by planners, even though the "entire unit" was committed to the operation. The Arab forces, because of their unique culture, language, religious, and, in some cases, logistic similarities were grouped together under parallel command and control arrangements. Cultural aspects thus played a significant role in the execution of operations.²

COMBINING NATIONAL FORCES INTO SUCCESSFUL COALITIONS

Because nations will only participate in future coalition operations if it is in their own national interest, it is important to determine the best fit for national forces.

Forces of all nations are structured for national purposes, not necessarily those of the coalition. While it is desirable that national force contributions meet specific needs for force balance and minimum size requirements for integration into the coalition effort, these conditions often will not be met. The force commander must integrate all elements into the coalition force and maximize their contribution regardless of need, size, or special competence. Nations may also contribute to future coalitions in other ways than committing forces, e.g., facilities, infrastructure, funding, and other resources. Future coalitions will need to recognize such contributions clearly, demonstrating that such contributions greatly add to the capabilities of the overall coalition.

During wartime, determination of whether to join a coalition can be based on relative success on the battlefield. For example, during World War II Italy and Romania switched sides moving from the Axis to the Allies. This occurred as Axis prospects for victory dimmed, and the governments of these two nations changed.

Deciding whether to join a coalition in peacetime can be much more difficult. Multiple factors must be taken into consideration including: the impact on national sovereignty; costs in resources and manpower; the impact on the nation's military forces caused by placing assets under coalition, not national, control; potential political-economic benefits to be gained; political factors, such as the impact joining the coalition will have on internal political opposition parties—will the military forces returning from a coalition operation return to find the government overthrown and severe political difficulties facing them; and the overall impact on national interests.³

Perceived affiliations of some members of the coalition to various factions in the conflict by the local population could be a problem for the coalition. Members must be perceived as neutral to be acceptable to a host nation in which peace operations are being conducted. Former colonial powers in Africa carry a certain amount of "baggage" with them. Care must be taken when putting them into a country which still

harbors hostility toward its former rulers. On the other hand, in some cases a former colonial power understands the culture and history of a region in conflict and may be the ideal coalition partner.

It is necessary to understand historical and cultural issues when considering when to use or not use neighboring states as part of an operational coalition. Neighboring states should be considered for use in conflict prevention operations. However, neighboring nations should not be used in any type of enforcement operations, because of the danger—whether perceived or real—that the neighboring nation could make political or economic gains at the expense of the country in which the operation is being conducted.

A significant effort must be made to prepare the local population to understand and accept the coalition forces operating in their country. Public information programs that are culturally attuned to the local population, and high visibility improvement projects, must be implemented early. Information operations will require training, but will become a force multiplier when local populations are prepared for coalition operations.

Training for Successful Coalitions.

Training will continue to be a national responsibility. It should focus on basic soldier skills and generalized training which can support coalition and peace support operations. Specialized training in support of future coalition operations should be conducted after assignment of specific missions. The potential exists for increased sharing of responsibility for training of coalition forces at the operational and strategic echelons. Because most potential coalition partners have conscript forces with relatively short periods of service, training to decrease historical and cultural differences should be concentrated on officers and NCOs.

Training for coalition operations should concentrate on two major areas: headquarters elements which should be trained through use of command post exercises, and

training and education of officers and NCOs. Experience has shown that headquarters elements, whether existing multinational headquarters or a national headquarters that has been designated to assume a lead nation role in a future coalition operation, require additional preparation to command coalition operations. In addition to enhanced communications and augmented language capabilities, specific mission training is necessary. Much of this training can be done in advance through the use of command post and computer assisted exercises, and seminars and workshops for key personnel. Emerging distance learning techniques may enhance training and education of individuals and units. Training in public affairs and civil military operations can be added to this package. Such training is rare or nonexistent in most of the national military forces of Eastern Europe and Africa.

As stated earlier, experience has shown that field training exercises have transient value because of rapid turnover of short-term conscripts in the majority of armies of Eastern Europe and Africa which will take part in future coalition operations. National armies should train their own soldiers in national doctrines and tactical execution.

The main advantage of field training exercises between national forces is that cultural and historical differences between nations decrease greatly after working together. After the collapse of the Soviet Union, Polish and German army units began training together, for the first time since the German invasion in 1939. The initial training was traumatic for the Poles. But as time passed, the units began working better and better together, overcoming cultural and historical differences. These kind of bilateral training exercises should work for any nation. Such training is of great value to units which will work together in designated coalition operations.

NEW MISSIONS AND PARTICIPANTS

A key factor to keep in mind is that military forces, historically and culturally, are not always well-suited to

civil conflicts of the type that future peace-support operations may deal with. Military forces in the majority of nations are organized, trained and maintained to fight and win wars, using all available force to be victorious in the shortest possible time. Such a "conflict/victory" culture may be just the opposite of what is desired for peace support operations as currently envisioned. Coalition military forces should not be used in ways that are outside their normal operations. As an example, military units should not be used as police in hunting war criminals. There are organizations trained to conduct police operations. Military forces should be used in the roles for which they are intended within the coalition operations.

Another challenge for future coalitions will be the problem of interaction with Non-Governmental Organizations (NGOs) and Private Volunteer Organizations (PVOs). In peace support operations, NGOs and PVOs make up the third corner of a triangle which has the peace support coalition and the contending forces at the other two angles. This is much different from conventional military operations and has its own "culture shock" for untrained forces. NGOs and PVOs have their own agendas and means of operating, which may clash with "conventional military thought" processes. In peace support operations, NGOs and PVOs have every right to operate in the same areas as coalition military forces. Therefore, military planners must prepare for interaction with these organizations.

Still another factor which has become an essential part of peace support operations, that is outside the normal culture of virtually all military organizations, is negotiation. For peace support operations, coalition military units must learn to persuade, not force. This includes learning to use one of the most effective means of persuasion, the media. This is a challenge with which all future coalitions will have to contend.

CONCLUSIONS AND FINDINGS

Problems in forming coalitions because of historical and cultural differences are a common theme throughout history. It should not surprise anyone that such problems will exist for future coalition operations. Successful operations of coalitions are difficult at best. Nations of unequal strength and different mind-sets must work together to achieve coalition goals—which are set by political decisionmakers who control the various military forces. The political mandate must be “translated” into a clear and achievable mission statement. Each nation will have its own national interests, political realities, and historical experiences which will determine how that nation reacts in a future coalition operation.

A broad base of coalition partners is needed to assure sufficient support for the operation and perceived impartiality within the nation where the coalition will be committed to action. As the coalition begins to take form, national interests, which always take priority, will influence the ability of political leaders of the various nations must agree on the goals for the coalition operation that the military can then implement.

Military doctrine is embedded in the ethos, traditions, heritage and national roles of the various armies of the world. Because of this, common doctrine is not achievable in the short term. Nevertheless, development of common operating principles for peace support operations can reduce the potential for friction within the coalition force caused by cultural and historical differences.

Common operating principles must be developed before the requirement to commit actual forces. In order to develop generic common operating principles for the conduct of peace support operations, workshops need to be conducted to define agreed-upon principles. With such generic principles already accepted, coalition partner nations can refine specific requirements for the conduct of operations to meet the impending crisis.

Organizations which have the ability to develop and coordinate such agreements on common principles include NATO, the Organization for Security and Cooperation in Europe (OSCE), and perhaps the WEU for European nations. In Africa, functioning sub-regional portions of the Organization of African Unity (OAU) may be the agencies to accomplish the requirements. The UN could likewise assume the role in Africa or elsewhere.

The agreements attained would allow coalition partners to have basic principles that serve as templates for future coalition operations. Such templates should include organizational frameworks and logistic support. With such common operating principles already agreed upon, the military will be better able to take the political goals given to the coalition and turn them into an achievable operational mission quickly and efficiently.

A generalized template might specify, for example, that combat units should be deployed in brigade strength as a minimum. Brigade-sized units are capable of serving in a mixed-nation higher unit, because tactical implementation of orders will follow national tactical doctrine. This is dependent on the intensity of the conflict. The more intense the level of conflict, the less capable mixed units will perform. Logistical units can be employed in smaller packets than combat units, as specialized units can be incorporated into the overall logistical plan. This will allow most interoperability and technological problems to be addressed at the brigade and higher level, helping avoid fragmentation of coalition command and control capabilities.

Lower level integration exacerbates differences in capabilities, communications, and culture. Focus can be placed on critical areas to improve interoperability: communications, intelligence, computers, munitions and fuels. Developing protocols and other common procedures will help resolve differences among the various national forces and may eventually lead to common doctrine for coalition peace support operations.

Strong consideration should be given to creating a standing headquarters for coalition operations, using already established organizations such as NATO, WEU, OSCE, or the UN. Specified national headquarters could be designated to become the lead nation for coalition operations in specified regions. As a minimum, multinational planning exercises using a regional lead nation concept could significantly improve initial operational response to emerging crises. Such training exercises will help overcome the initial confusion of coalition operations and will assist in overcoming cultural problems by identifying them in a training situation before an actual crisis occurs. Such training exercises must look beyond the problem of initial entry into a peace support operation and must carry the scenario into worst case situations where the character of the operation degenerates into higher intensity combat.

Education of officers and NCOs will help change preconceptions and misperceptions concerning the roles and abilities of other national forces. The Marshall Center has shown this to be the case for the nations of Eastern Europe. Training along the lines of that offered by the Marshall Center should be expanded into national military schools. Something like the Marshall Center or the School of the Americas in Fort Benning, Georgia, should be considered to support education and training of officers and NCOs from African nations. The focus on education and training to overcome cultural and historical biases will pay dividends both within the coalition and within the countries in which the coalition will conduct operations.

The activities of the Marshall Center are doing a great deal to overcome the potential for future misunderstandings. However, the center is currently restricted to relatively senior personnel. The level of participation should be expanded to include more junior military personnel from Eastern European nations, either at the Marshall Center or another location in Europe.

Current logistics planning for coalition operations shows that logistics is one of the weakest elements of such

operations. Part of this is because the great majority of national armies cannot support themselves logistically outside their own national boundaries. This requires either a lead nation to fill the logistics gap or an inordinate amount of time for initial deployment of forces and great difficulties for logistical sustainment. NATO or the United States should sponsor an assessment of logistics requirements for potential coalition operations. With this assessment, logistic planning forums should be initiated with those nations which could be expected to participate in future coalitions. This planning should identify initial logistic requirements with which coalition units should deploy, determine reasonable national logistic support requirements, and discuss such difficult issues as cost sharing for coalition operations. Logistic command post exercises (CPXs) could exercise national logistic capabilities and develop templates which could provide general guidelines for future operations.

In addition to language training there are other, simpler, concepts concerning the use of language that should be adopted for coalition operations. Dictionaries of common terms must be developed and distributed, including logistical as well as tactical terms. Acronyms and abbreviations should be avoided in order to assure a clear understanding of terms within a coalition. Operational and logistic plans and orders should be written in greater detail and clarity to ensure that there are no misunderstandings. This is directly counter to current U.S. policies, which try to minimize verbiage and attempt to make plans as brief as possible, while still being complete. Coalition plans and directives must be written so that it is nearly impossible to misunderstand what is supposed to happen. This will require conscious effort, especially on the part of those nations which use English as a *first* language.

Changes in the world situation since 1989 provide opportunities for Western nations to work in coalition with former adversaries from Eastern Europe in peace support operations. These opportunities are new and challenging. The leaders of military forces from throughout Europe and

Africa are now working in partnership with the United States to prepare for future coalition operations. The ideas presented here are not the answers to the issues. But perhaps they will broaden the thought processes of those tasked to form a future coalition and allow them to plan and conduct operations more effectively and efficiently. Steps taken now, to develop common operating procedures, to train together, and to educate future leaders will help ensure that future coalitions will have a much better chance of successfully accomplishing the assigned mission. Perhaps someday historians will look at this period of time and determine that a new era of successful coalition operations resulted from the actions that are now in their earliest stages.

ENDNOTES - CHAPTER 1

1. Alfred D. Chandler, Jr., ed., *The Papers of Dwight David Eisenhower: The War Years III*, Baltimore: Johns Hopkins Press, 1970, pp. 1420-1422.

2. Wayne A. Silkett, "Alliance and Coalition Warfare," *Parameters*, Summer 1993, pp. 74-83, *passim*. This is an excellent article for considering a wide variety of factors concerning coalition warfare.

3. Thomas R. Stone, "On Coalitions," *Military Review*, September 1984, pp. 31-32.

CHAPTER 2

COMMAND IN COALITION OPERATIONS

Thomas Durell-Young

It is a truism that effective command is a *sine qua non* for the successful prosecution of military operations. While superb generalship may not ensure a successful military engagement or campaign, there are precious few examples of poor command leading to victory. If one accepts the proposition, widely held among Western militaries, that "unity of command" is a crucial element of effective command, then one must ponder why it is that it is so difficult to achieve. Whether due to politics, personalities, or a combination of both, achieving unity of command consistently presents itself as a difficult aspect of civil-military relations in democratic governments.

One should not assume, however, that achieving unity of command is a problem that should only be associated with unsophisticated military establishments. In the United Kingdom, for example, it was only in spring 1996 that the "Permanent Joint Headquarters" was established to provide a permanent structure over which a joint command of British forces will be effected in peace support operations.¹ In the Federal Republic of Germany, despite some recent organizational reforms, which by Bonn's standards are quite significant, that country still does not possess a standing "J-3 operations directorate" as one would expect of a power of Germany's standing.² Even in the United States, it was only following the enactment of the 1986 Goldwater-Nichols Defense Reorganization Act that clarity was established concerning the command relationship between the combatant commanders and the National Command Authorities.³ Clearly, effecting an unambiguous national command structure is an ongoing challenge even to democratic governments with strong institutions and traditions of ensuring civilian control over the military.

An understanding of the difficulty of achieving unity of command at the national level is essential in order to appreciate the seemingly insurmountable problems of creating an effective command organization within a coalition of sovereign states. To the existing difficulties nations bring to these operations must be added competing national interests (i.e., politics), sensitivities (i.e., personalities), and less than unified national political objectives.⁴ Moreover, international security organizations, which are essential in providing needed political legitimacy to coalitions, have also become increasingly active in influencing coalition operations, often with their own agenda, (e.g., UN Protection Force in Bosnia-Herzegovina).

Finally, in the post-Cold War world, it is evident that military forces, within coalitions, are being increasingly used for peace support operations. Due to the lack of strong politically-unifying forces in such operations, developing coalition command arrangements has often proven frustrating.

While not minimizing the problems associated with ascertaining clear command lines at the national level, it must be acknowledged that all of the difficulties present within nations are compounded with new ones in coalitions. Simply stated, the task that confronts coalition leaders is to overcome justifiable national political and military sensitivities to enable the designated coalition commander to accomplish his assigned mission. The purpose of this essay is to outline potential solutions for political-military officials in their approach to the nettlesome issue of "command."

First, it is important that readers have a clear understanding of command authority terminology and appreciation of the subtleties and nuances that plague them. Second, a discussion of the limitations under which foreign commanders must operate will be presented. Third, a case will be made that command authorities for coalition land operations should be determined from the mission(s) assigned to the force. Implicit in this statement is that the command authorities recommended by military authorities

for the coalition force should be based, as much as possible, upon military considerations. Fourth, the issue of command structures and coalition operations will be examined, with a view toward assessing some of their specific strengths and weaknesses in specific coalition operations. Finally, the essay will conclude with observations about why coalition planning should provide for the eventuality that only unity of "effort," rather than unity of "command," is politically possible.

Terminology: Definitions.

Command authorities must be one of the most widely misunderstood of military subjects. While there has been a plethora of essays and books written on "command and control,"⁵ command authorities are rarely sharply defined, let alone analyzed from the perspective of a commander's requirements as determined by his missions.⁶ Indeed, otherwise groundbreaking essays dealing with multinational military operations often deal only superficially with this subject.⁷ What has been missing is a systematic and disciplined approach to ascertaining which command authorities are appropriate for commanders, particularly within a multinational context.

In a rather contradictory fashion, in workshops and discussions with senior Eastern European and African officers, the current writer has discovered a tendency to use terms common to NATO command authorities, yet (like their NATO country counterparts) there is less understanding of their exact definition. Indeed, a fundamental problem in addressing command authorities in coalitions is that there is no universally accepted international nomenclature. Thus, perforce, one must rely upon Western, i.e., NATO, terms, given the lack of any viable alternatives. Yet, one should not assume that adopting Alliance terminology will prove a panacea. Even as sophisticated and well-developed an alliance as NATO has difficulties in this regard.

In NATO-agreed usage, there are four levels of Alliance command authorities. These are:

- Operational Command (OPCOM)
- Operational Control (OPCON)
- Tactical Command (TACOM)
- Tactical Control (TACON)

In Chart 1, the official definitions of the terms are presented as they appear in AAP-6.⁸ A comparison of the four terms is presented in Chart 2. In its most simplistic form, OPCOM provides to a commander the greatest degree of authority over his assigned forces, while TACON provides the least.

An important distinction must be made between OPCOM and OPCON. The principal distinguishing factor between these two levels of command authority is that OPCOM allows a commander to assign and reassign missions of subordinate forces, as well as task organize (or "fragment") subordinate assigned units, in addition to those authorities found in OPCON (e.g., to assign and reassign tasks, direct local movement). TACOM and TACON provide the least authority to a commander by allowing him only to exercise tactical level control, such as deploying forces, directing movements and maneuvers for a short or specified duration, or limited to a specific area.

To complicate this otherwise straightforward description of NATO command authorities, there are distinctions between national and NATO definitions of command authorities. France, for example, defines "OPCOM" ("commandement operationnel") as constituting "national command," and therefore not transferable to a coalition or Alliance commander.⁹ The United States does not have national doctrinal definitions for OPCOM or TACOM, but its definition for TACON is identical to NATO's definition.¹⁰ However, the U.S. definition of OPCON substantially differs from the NATO definition.

CHART 1.
DEFINITIONS OF NATO COMMAND
AUTHORITIES.

OPERATIONAL COMMAND:

The authority granted to a commander to assign missions or tasks to subordinate commanders, to deploy units, to reassign forces, and to retain or delegate operational and/or tactical control as may be deemed necessary. It does not of itself include responsibility for administration or logistics. May also be used to denote the forces assigned to a commander.

OPERATIONAL CONTROL:

The authority delegated to a commander to direct forces assigned so that the commander may accomplish specific missions or tasks which are usually limited by function, time, or location; to deploy units concerned, and to retain or assign tactical control to those units. It does not include authority to assign separate employment of components of the units concerned. Neither does it, of itself, include administrative or logistic control.

TACTICAL COMMAND:

The authority delegated to a commander to assign tasks to forces under his command for the accomplishment of the mission assigned by higher authority.

TACTICAL CONTROL:

The detailed and, usually, local direction and control of movements or maneuvers necessary to accomplish missions or tasks assigned.

Source: AAP-6, *NATO Glossary of Terms 1992*, pp. 2-0-2; 2-T-1.

CHART 2.
COMPARISON OF NATO COMMAND
AUTHORITIES.

	Most Control ← → Least Control			
Authority	OPCOM	OPCON	TACOM	TACON
Assign Mission	YES			
Assign Tasks	YES		YES	
Reassign Forces	YES			
Granted to a Commander	YES			
Employ Unit Components Separately		NO		
Reassign OPCON	YES			
Retain OPCON	YES			
Delegate OPCON	YES	YES with Aprvl		
Delegate to a Commander		YES	YES	
Superior to TACOM		YES		
Assign TACOM		YES		
Retain TACON	YES	YES		
Delegate TACON	YES	YES		
Direct Forces		YES		
Deploy Forces	YES	YES		
Local Direction & Control of Movements and Maneuver				YES
Administrative Command	NO			
Day-to-Day Direction	NO	YES		
Administrative Control		NO		
Logistics Support/Command	NO			
Logistics Control		NO		

(See Chart 3 for a comparison of NATO and U.S. definitions.) This variance in definitions exists despite Washington's *agreement* to the NATO definitions by virtue of its acceding to AAP-6, "NATO Glossary of Terms and Definitions."

These differences, as recognized in the U.S. Army's recently published, *FM 100-7, Decisive Force*, resulted in not inconsequential difficulties for NATO forces (despite their long history of cooperation) operating together during Operations Desert Shield/Desert Storm.¹¹ Even a key U.S. policy document dealing with peace support operations does not strictly adhere to established definitions. President Clinton's Presidential Decision Directive (PDD)-25, which explicitly addresses U.S. policy toward multilateral peace operations, uses a definition of OPCON which does *not* conform to that established by the U.S. Joint Chiefs of Staff (JCS) in the *Unified Action Armed Forces Joint Pub 0-2*.¹² Rather, it resembles the JCS's definition of TACON, or the NATO definition of OPCON.¹³ One could question whether there are now *three* U.S. recognized definitions of "OPCON."¹⁴ Indeed, although not official, the initial and second draft *Joint Doctrine for Multinational Operations, Joint Pub 3-16*, uses the description as given by PDD-25 in place of that which is officially sanctioned by the JCS (see Chart 4).¹⁵

In short, there is no end in sight among NATO nations to the lack of universally-accepted definitions of command authorities. Additionally, one should not conclude that the adoption of internationally-accepted nomenclature and definitions will necessarily solve this problem. It is not infrequent for a nation to add or remove authorities from the command authority granted, e.g., OPCOM(-), or OPCON(+). In sum, both officials and planners need to be aware that command authority definitions are not internationally standardized, conflict with many similar national definitions, and are often modified for specific operations.

CHART 3.

COMPARISON OF NATO AND U.S. COMMAND AUTHORITY DEFINITIONS.

Authority	Most Control ← → Least Control			
	OPCOM	OPCON	TACOM	TACON
Granted to a Commander	NATO			
Reassign OPCOM	NATO			
Retain OPCOM	NATO	US		
Delegate OPCON	NATO	NATO with apprvl US		
Delegate to a Commander		NATO	NATO	
Superior to TACOM		NATO		
Assign TACOM		NATO		
Retain TACON	NATO	NATO/US		NATO/US
Delegate TACON	NATO	NATO		
Assign Mission	NATO			
Assign Tasks	NATO	US	NATO	
Direct Forces (Give Orders)		NATO/US		
Reassign Forces	NATO			
Deploy Forces	NATO	NATO		NATO/US
Local Direction & Control of Movements & Maneuver		US		NATO/US
Employ Unit Components Separately		NATO-NO US-YES		
Administrative Command	NATO-NO			
Day-to-Day Direction	NATO-NO	NATO/US		NATO/US
Administrative Control		NATO-NO		
Logistics Support/Command	NATO-NO			
Logistics Control		NATO-NO		
<p>"Full Command" (NATO ONLY): No NATO Commander has full command over forces assigned to him because nations assign only OPCOM or OPCON</p> <p>"Combatant Command (COCOM)" (US ONLY: Title 10 USC, SEC 164. Given only to unified commanders.</p> <p>KEY: - "NATO" - Specifically permitted in a NATO Publication</p> <p>- "NATO-NO" - Specifically prohibited in a NATO Publication</p> <p>- "US" - Authorized in US Doctrine</p> <p>- BLANK - Not mentioned in any NATO or US Publication</p> <p>- NATO/US - Definitions for TACON are identical</p>				

CHART 4.
"OPCON" COMPARED.

Authority	NATO	DOD	PDD-25
Assign Mission		YES	NO
Assign Tasks	YES	YES	YES
Reassign Tasks		YES	NO
Employ Unit Components Separately	NO	YES	NO
Direct Mission Training		YES	
Retain OPCON		YES	
Delegate OPCON	YES with apprvl	YES	
Delegate to CDR	YES	YES	
Superior to TACOM/TACON	YES		
Assign TACOM/TACON	YES		
Retain TACOM/TACON	YES		
Delegate TACOM/TACON	YES		
Direct Forces	YES	YES	
Deploy Forces	YES	YES	YES
Admin Command		NO	
Day-to-Day Direction	YES	YES	NO
Admin Control	NO	NO	NO
Logistics SPT/CMD		NO	NO
Logistics Control	NO	NO	
Sources: AAP-6, <i>NATO Glossary of Terms and Definitions</i> , 1992; DoD <i>Dictionary of Military and Associated Terms</i> , Joint Pub 1-02, March 23, 1994; and "The Clinton Administration's Policy on Reforming Multilateral Peace Operations," PDD-25, May 1994.			

Nuances of Multinational "Command."

Five key points need to be understood at the outset to comprehend problems associated with command in coalition operations. First, and foremost, nations only surrender *national command* ("Full Command" in NATO parlance) of their forces in the face of the most extreme circumstances, and therefore it is quite rare.¹⁶ Important matters of discipline, pay, promotion, etc., remain solely within national command channels as inherent manifestations of national sovereignty. Thus, one must distinguish between *national command* and the possible *operational employment* of armed forces.¹⁷ For example, in addressing the issue of the operational employment of the U.S. armed forces, the Clinton administration's PDD-25 makes the point quite clear that "American forces have served under the operational control of foreign commanders since the Revolutionary War, including in World War I, World War II, Operation Desert Storm and in NATO since its inception." Conversely, the document stresses, "The President retains and will never relinquish command authority over U.S. forces."¹⁸

Second, nations and politicians are generally loath to assign their forces to a foreign commander. Because military forces are a *sine qua non* of a state's most basic manifestation of sovereignty, it is not surprising that they are not lightly delegated to foreign commanders. It is often the case that instead of ascertaining which levels of command a coalition commander requires to accomplish his mission, national authorities attempt to relinquish the least amount of authority, thereby retaining as much control over their forces as possible. Moreover, once authority has been delegated to the coalition commander, national authorities have historically been reluctant to reexamine and expand these authorities. For example, a study among Central Region NATO armies was unable to find one contemporary instance where a multinational force commander engaged in peace support operations had his command authorities changed when his mission changed, consciously or as a result of "mission creep." Thus, it is safe to assume that the

command authorities a coalition commander begins with are what he will have throughout his command.¹⁹

Third, and related strictly to NATO (albeit informative for coalition considerations), a combination of these two important national sensitivities has resulted in a reluctance on the part of some NATO states to place their national forces under OPCOM of allied commanders, particularly in peacetime. This is despite the fact that there are no constitutional or legal impediments in Central Region countries to placing their forces under the OPCOM of an allied commander.²⁰ The key sensitivity among many allied officials is the fear of an inability to control mission assignments and that their forces will be "fragmented."

However, a strong case can be made for the operational requirement that *land* coalition commanders require a greater level of command authority. Unlike their naval and air counterpart, armies have their own *sui generis* characteristics when assigning them to a non-national commander. Land combat forces consist of combined arms teams, made up of various subset formations, each of which may have different mission-essential tasks assigned to them.²¹ Ships and aircraft, on the other hand, can be thought of as integral platforms of weapons and capabilities which can be delegated in their entirety to non-national commanders to carry out specified tasks.²² Hence, for navies and air forces, TACOM and TACON are entirely appropriate.

Depending upon the missions and mission-essential tasks, a land coalition commander (who might have formations located over a wide geographic area) could well require a wide-range of command authorities in order to accomplish his assigned objectives.²³ For instance, he may need to assign new missions and tasks, reassign forces, or task organize subordinate forces. Indeed, given potential mission instability in some peace support operations, a greater level of command authority than initially anticipated could be needed in order to protect the force. These conditions dictate that coalition commanders must

possess sufficiently strong command authorities to permit them to perform such tasks.²⁵

Fourth, perhaps as a result of this reluctance on the part of nations to cede command authorities to foreign commanders, there is a problem of delegating command authorities. Because of the lack of internationally-recognized and accepted command authority definitions, this condition is NATO-specific. NATO command authorities do not universally allow their delegation to a subordinate commander. For example, under current provisions, OPCOM can only be returned to its originating source and cannot be delegated by a commander to a subordinate. An allied commander possessing OPCOM can only delegate OPCON to a subordinate commander. Conversely, an allied commander with OPCON can delegate OPCON, but only after obtaining national consent (see Chart 2). This limitation is yet another manifestation of countries' insistence upon retaining authority over their national forces.

Fifth and finally, there is no consensus within NATO regarding whether an allied commander can do something not explicitly proscribed under his command authority. One school interprets command authority definitions in a strictly catholic sense, i.e., *unless* specifically stipulated, a NATO commander cannot exercise other authorities, stated or implied (e.g., under OPCOM, a multinational force commander can assign missions). The other school interprets command authorities as allowing for the NATO commander to exercise his command *unless* it is explicitly stated otherwise (e.g., under OPCON, a multinational force commander *cannot* employ unit components separately). While no unified interpretation exists, the first school appears to be more frequently accepted in the Alliance.

While acknowledging that the NATO experience in command authorities is not applicable to all other alliances, let alone coalitions, it is instructive nevertheless. That one of history's most celebrated and highly-integrated peacetime alliances has been unable to overcome these command problems illustrates the inherent difficulty of

alliance and coalition command. Therefore, one should approach the issue of command authorities in coalition operations with an informed view regarding the lack of agreement over terminology and the sensitivities nations possess when delegating command of their forces to a foreign commander.²⁶

Defining Command Authority Requirements.

From the above review of the nuances and problems which surround commanding coalition operations, one should have a better appreciation of the difficulty of achieving "unity of command." Simply stated, countries are frequently more concerned with maintaining control over their national contributions than they are willing to accede to the common coalition effort. An exception to this rule, however, is that in offensive, high-intensity and politically perilous operations (e.g., *Desert Storm*), countries have proven capable of overcoming their reluctance to grant sufficient command authorities to the coalition commander in the interest of achieving a successful campaign.²⁷ Achieving this elusive goal has perhaps been aided by the Western practice of the military force commanding the coalition subordinating some of its own units to the command of foreign force commanders, thereby fostering a degree of reciprocity and trust.

Where most contemporary coalition operations are likely to face command authority challenges, however, is the conduct of peace support operations. There is little international consensus as to exactly which missions fall under the title of peace support operations. The most comprehensive and probably widely acknowledged definition of these types of missions is found in NATO document MC 327, "Peace Support Operations." This document identifies six peace support operational missions:

- Conflict Prevention;
- Peacemaking;

- Peacekeeping;
- Humanitarian Aid;
- Peace Enforcement; and
- Peacebuilding.

A challenge to senior military leadership is to argue on military grounds that a seemingly innocuous peace support mission could well require high command authorities (e.g., to protect the force should conditions/missions change). Thus, in peace support operations, or indeed even war-fighting, it is imperative that sound militarily-derived rationales for the appropriate command authorities be presented to senior political leadership.²⁸

Notwithstanding acknowledging the authority of political considerations and guidance, in principle, the planning of all military operations should begin with the definition of the exact mission(s), from which flows stated and implied tasks. A hypothetical phasing of mission planning should include the following:²⁹

Phase O: Planning and Preparation (*N.B.:* a coalition force commander will have planning responsibilities, however, he may have: 1) little or no authority over assigned forces, 2) only limited knowledge of the number of forces assigned, and their arrival time in theater, and 3) little guidance when Transfer of Authority (TOA) will take place.)

Phase 1: Deployment

Phase 2: Employment

Phase 3: Operations

Phase 4: Redeployment

From the planning phases of a specific mission (be it warfighting or a peace support operation), mission-essential tasks can be derived. Particularly as regards phases 2 and 3, the expected intensity of military operations can be discerned. It is also in these phases in peace support

operations that a coalition is most likely to experience mission instability and "mission creep."

Before assessing directly the command authorities required in warfighting campaigns and peace support operations, in a generic sense, there are a number of important considerations which should be addressed. These include:

- the composition and size of the forces under the coalition commander's authority (i.e., a battalion, brigade, etc.);
- the likelihood of a change in mission;
- the state of rules of engagement—ROE (which ideally should be universally employed by coalition forces);
- the potential need to task organize forces; and,
- whether there may be a need to conduct offensive operations.

Starting with warfighting campaigns, an examination of common mission-essential tasks in the phases of an operation will demonstrate the necessity to plan for offensive operations. The coalition commander will require the ability, for example, to reassign missions, task organize his forces, delegate sufficient authority when required, and be prepared to protect the force.³⁰ Thus, from a military perspective, he should have the highest level of command authorities possible, political realities allowing.

While defining command authority requirements is straightforward for warfighting campaigns, it is much more complicated when approaching peace support operations. At the political level, nations are not as willing to submit their political interests to the common objective as they would be during a warfighting campaign. At the operational level, in addition to common tasks, which are generic for all peace support operations, there are also tasks (both stated and implied) which are specific for each mission. In a

general sense, a coalition commander will only need a low level of command authority for missions such as Humanitarian Aid. Conversely, a coalition commander charged with conducting a Peace Enforcement mission, which could include offensive operations, would require a high level of command authority. Engaging in the other four peace support missions identified in MC 327 (Conflict Prevention, Peacekeeping, Peacemaking, and Peacebuilding), would necessitate a coalition commander to have authorities at a level somewhere between Humanitarian Aid and Peace Enforcement.

Greater specificity in the definition of command authorities for peace support operations is difficult to make in a general sense. However, essential considerations which may not be immediately obvious to civilian officials include:

- How can the coalition commander respond to “mission creep” with his given command authority? For example, protection of the force may require the ability to task organize which is only allowed within NATO under OPCOM.³²
- Are coalition political mechanisms established to allow the coalition commander to have his request for changes in command authority addressed in a timely fashion? If not, then a higher command authority than that immediately foreseen may be required by the commander in order to have the flexibility to respond to changing circumstances.
- Are both national and coalition ROE in accordance with the command authorities given to the commander? Restrictive national ROE could well negate a high level of command authority. An endorsed, formatted, menu of ROE, even if individual nations’ ROE are different, would enable the commander to have a full understanding of national restrictions.³³

- Finally, are ROE, command authorities, and the forces/resources available to the coalition commander in agreement, to enable him to accomplish his mission(s)?

In sum, the primary factor in assessing common authority requirements in peace support operations is the ability of the coalition force commander to:

- possess command authority necessary to execute his mission(s),
- protect the force, and
- have his request for changes in command authority addressed in a timely fashion.

Given the extreme political sensitivity nations have consistently shown when placing their forces under foreign commanders, and their concomitant reluctance to revisit command authority decisions, prudence dictates that higher authorities than are necessarily required to accomplish the mission should be requested in the initial planning phase. This would enable the coalition commander to ensure the security of his force, as well as be in a position to react swiftly to an unforeseen change in mission.

Such a proposal may be novel and impolitic for military authorities to recommend to their national political authorities. However, one must consider two compelling factors. First, the frequency of participation in peace support operations, at least from the perspective of some countries (e.g., the United States), has increased considerably since the end of the Cold War. Moreover, there is no indication that this is about to change in the foreseeable future. Second, land forces employed in these operations tend to be battalion or brigade size, and often do not possess a combined-arms, self-sufficient capability to provide adequately for their own self-defense, particularly in the case of a change of mission, (i.e., to one of greater intensity).

A seemingly benign Humanitarian Aid mission can quickly become unstable and turn violent, as the Belgian Army discovered in April 1994 in Rwanda.³⁴ National political and diplomatic authorities need to be made aware of the impact of the command authority requirements, prior to contributing to coalition operations. Barring this solution, it is imperative that coalitions create political consultative arrangements that will enable rapid attention to the coalition commander's requests for changes in his command authority.

Command Structure Considerations.

If one accepts the proposition that from a military perspective command authorities in coalitions should be made or at least strongly influenced by the mission(s) and composition of the force, then this should also hold true for the particular command structure chosen. As in the case of matching ROE to the delegated command authority, a command structure should be selected that best suits the political realities and military requirements of a specific operation.

In a general sense, one can identify three types of structures: lead nation, parallel or integrated.³⁵ It should be noted that these structures are not necessarily mutually exclusive. The Russian contribution to IFOR/SFOR in Bosnia-Herzegovina and the "sui generis" command relationships of its brigade commander to the U.S. division commander and the Deputy for Russian Forces in IFOR/SFOR almost defy strict structural definition.³⁶ To be sure, as is the case with command authorities, a choice in command structures will be highly dependent upon decisions made by national political, and perhaps even international, authorities. Yet, political-military advice should be prepared for consideration by political authorities.

Probably most important, given that each coalition is almost by definition unique, it makes little sense to attempt to establish guiding principles for selection of command

structures which would be universal in their application.³⁷ Rather, what may be more useful is to identify some strengths and weaknesses which may surface in selecting an appropriate structure.³⁸

An integrated coalition command structure probably provides the most political advantages. Participating countries are represented in the command headquarters in principal staff billets, not solely as liaison officers, thereby allowing contributing governments to monitor decisionmaking. An obvious disadvantage is the varying levels and types of staff training throughout the world, which could have an adverse effect upon the efficient workings of the headquarters. If a coalition consists of states with a history of close military cooperation and similar staff procedures, an integrated structure may be appropriate, although, even in this case, creating an effective integrated staff could still take time. For a heterogeneous, *ad hoc* coalition with a high-intensity mission, an integrated structure may be inappropriate.

A lead nation command structure, conversely, may bring certain political disadvantages. Normally, a large nation will provide the command headquarters, staffed with liaison officers (which may or may not be integrated into the staff elements), and will exercise command over operations. While some nations might chafe at such an arrangement, there may be less obvious advantages. For instance, if the lead nation is the United States or a major European state, smaller contributing nations may feel reassured that should the operation change for the worse, the lead nation could respond quickly and effectively, as well as provide the best protection for the force. However, many countries that contribute forces to peace support operations have colonial legacies that could reduce their willingness to accept such a structure because of national political sensitivities, if the lead nation is that country's former colonial master.

A parallel command almost appears to be a counter-intuitive structure, given the apparent lack of unity of command. Yet, as demonstrated in the case of Desert Storm, where Western and Arab/Muslim forces had their

own separate chain of command, such a command organization can be successful. It should be noted, however, that given the sizeable presence of U.S. forces and the role taken by General Schwarzkopf in planning the campaign, one could make the argument that a parallel structure worked in this case, due to the presence of a lead nation. In other words, a parallel structure without an explicit or implicit lead nation may not be able to develop and maintain an essential unity of purpose in the conduct of operations.³⁹

Conclusion: Unity of Command, or Effort?

In recent years, one can observe a noticeable move toward describing and defining "command" in a technological manner, i.e., "command, control and communications" (C³), and more recently, "command, control, communications, computers" (C⁴). Given the phenomenal increase in the capabilities and capacities of micro-processors, such emphasis on the means to increase and (hopefully) manage information provided to a commander is both understandable and warranted. Superior knowledge of the battlefield and the ability to concentrate forces at the most opportune time to close upon the enemy is, without doubt, a capability that should not be underrated, or ignored.

Yet "command," whether exercised nationally, or within a coalition, is an inherently politically-bound activity. Military forces, one of the most basic manifestations of national sovereignty, are jealously guarded by national authorities, who only reluctantly surrender them to a foreign commander. Hence, obtaining the requisite command authority for a coalition force commander to enable him to accomplish his mission is likely to be both complicated and hindered by political considerations. In addition, the issue of command in coalition operations can be complicated by the lack of internationally-recognized nomenclature of command authorities, let alone an appreciation of the nuances which govern the issue of command.

Thus, while not disparaging the importance of "C³" or "C⁴," "command" remains at its most basic foundation, a political, not technological, issue and its nuances and subtleties can only be fully understood within this context. An appreciation of this fact is essential when approaching command in coalition operations. Normal national political sensitivities over the command of armed forces is complicated and compounded by contending national interests and objectives, let alone different approaches countries take toward military operations.

The reason for stressing the importance of political considerations and nations' natural sensitivities over the matter of command is key in understanding why "unity of command," a widely accepted principle of war in Western militaries, is so difficult to achieve. To be sure, in a warfighting campaign, national political sensitivities are often subjected to military necessity. For instance, although Paris placed its land and air forces operating in *Desert Storm* in the Arabian peninsula "only" under the TACON of the U.S. theater commander,⁴⁰ General Schwarzkopf, the fact remains the French government did so, despite a bruising debate in French National Assembly.⁴¹

Achieving unity of command is likely to be the most difficult within the context of peace support operations. Governments and international organizations have all too often discounted the potential for mission shift in these operations (the experience of UNPROFOR in Bosnia-Herzegovina comes to mind) and the concomitant need for the coalition force commander to protect the force when threatened. Notwithstanding the best efforts of military officials to argue for military rationales for appropriate command authorities to support the objective of unity of command, the historical record does not support optimism.

For this reason, in the planning process for coalition operations, it would be prudent to presume that the best the coalition commander may hope to achieve is unity of effort, vice unity of command. While this may seem to be unduly deterministic, political-military officials need to be aware of the political challenges they will face when proposing the

need for unity of command in a coalition. In consequence, should "unity of effort" be the most the coalition commander can hope to have, then he can advise his political authorities of *his* need for some conditional authority which will enable him, *in extremis*, to protect the force. To be sure, this is hardly an ideal solution to a complex and crucial aspect of "commanding" an operation. Nonetheless, acceptance of this political reality could be instrumental in fore-arming a future coalition commander for the realities he is likely to face.

ENDNOTES - CHAPTER 2

1. See *The Independent* (London), April 4, 1996.
2. See my essay, "German National Command Structures after Unification: A New German General Staff?" *Armed Forces and Society*, Vol. 22, No. 3, Spring 1996, pp. 379-400.
3. For an analysis of command problems in the U.S. military pre-Goldwater-Nichols Act see, U.S. Congress, Senate, Committee on Armed Services, *Defense Organization: The Need for Change*, 99th Congress, 1st Session, Washington, DC: U.S. Government Printing Office, 1985, pp. 303-324.
4. See, for example, Sir Frederick Maurice on the World War I experience in *Lessons of Allied Cooperation: Naval, Military and Air, 1914-1918*, London: Oxford University Press, 1942.
5. See, for example, Jon L. Boyes, *et al.*, *Principles of Command and Control*, Washington, DC: AFCEA/SIGNAL Magazine C³I Series, 1987; Martin Van Creveld, *Command in War*, Cambridge, MA: Harvard University Press, 1985; Paul B. Stares, *Command Performance*, Washington, DC: The Brookings Institution, 1991; and, Thomas P. Coakley, *Command and Control for War and Peace*, Washington, DC: National Defense University Press, 1992.
6. Excellent exceptions to this general rule is found in U.S. Army, *FM 100-7; Decisive Force: The Army in Theater Operations* (Final Approved Draft), Washington, DC: Headquarters, Department of the Army, February 17, 1995, pp. 2-9/2-11; *idem*, *FM 100-8; The Army in Multinational Operations* (Doctrinal Review Approval Group), Washington, DC: Headquarters, Department of the Army, April 26, 1996, p. 2-7/-14.

7. See John Mackinlay and Jarat Chopra, *A Draft Concept of Second Generation Multinational Operations 1993*, Providence, RI: The Thomas J. Watson Jr. Institute for International Studies, 1993, p. 3; and, Roger H. Palin, "Multinational Military Forces: Problems and Prospects," *Adelphi Paper No. 294*, London: The International Institute for Strategic Studies, April 1995, pp. 18-19. In the latter work, the lack of analysis of definitions and discussion of what militarily-sound methods should be considered when ascertaining command authorities detracts from an otherwise superb analysis of multinational operations.

8. "NATO Glossary of Terms and Definitions (English and French)" (AAP-6).

9. To make matters even more complicated the French also use the term "commandement operationnel national." Briefing, "Le COMFRANCE," Creil, Etat-Major Interarmees de Planification Operationnelle, April 18, 1996.

10. See, *Unified Action Armed Forces (UNAAF), Joint Pub 0-2*, Washington, DC, Joint Chiefs of Staff, August 11, 1994, pp. III-10 through III-12.

11. *FM 100-7, Decisive Force*, pp. 2-10/2-11.

12. *UNAAF, Joint Pub 0-2*, pp. III-10 through III-12.

13. "Operational control is a subset of command. It is given for a specific time frame or mission and includes the authority to assign tasks to U.S. forces already deployed by the President, and assign tasks to U.S. units led by U.S. officers. Within the limits of operational control, a foreign UN commander *cannot*: change the mission or deploy U.S. forces outside the area of responsibility agreed to by the President, separate units, divide their supplies, administer discipline, promote anyone, or change their internal organization." See, *The Clinton Administration's Policy on Reforming Multilateral Peace Operations*, PDD-25, May 1994, p. 10. Cf. this definition of OPCON with that found in, *Department of Defense Dictionary of Military and Associated Terms*, Joint Pub 1-02, Washington, DC: U.S. Government Printing Office, March 23, 1994, pp. 274-275. The key point is that the administration's directive proscribes assigning new missions to U.S. forces, as well as their fragmentation.

14. To complicate matters further there is also "Combined OPCON" which is used in PACOM, CINCUNC, CFC, USFK. See *Joint Doctrine for Multinational Operations, Joint Pub 3-16, First Draft*, Washington, DC, Joint Chiefs of Staff, July 31, 1995, pp. II-1 through II-2; and, second draft, April 30, 1996, pp. A-3 through A-4.

15. See, *ibid.*, pp. II-8 through II-9.

16. For example: "It is a fact of alliance life, however, that NATO's command system has no supernational authority. Sovereignty rests unequivocally with the national governments." Stares, *Command Performance*, p. 8. "The President retrains and will never relinquish command authority over U.S. forces." See "Command and Control of U.S. Forces," in *The Clinton Administration's Policy on Reforming Multilateral Peace Operations*, p. 9.

17. While this point may appear obvious, *in extremis*, this difference was not recognized, for instance, in the Republican Party's important 1994 "Contract with America." To wit: "No U.S. troops under UN Command..." See, "Number 6: The National Security Restoration Act," in "GOP 'Contract with America'," *Congressional Quarterly Weekly Report*, Vol. 52, No. 44, November 12, 1994, pp. 3218.

18. See, *The Clinton Administration's Policy on Reforming Multilateral Peace Operations*, p. 9.

19. *Multinational Force Command Authorities Handbook: Proceedings of the CR-CAST Working Group on Command Authorities Required for a Multinational Force Commander*, Carlisle Barracks, PA: U.S. Army War College, September 1, 1995, pp. 7-9.

20. *Ibid.*, point 3.4.

21. See, Department of the Army, *FM 100-5, Operations*, Washington, DC, June 1993, pp. 2-2/2-3.

22. See Palin, *Multinational Military Forces*, pp. 52-54.

23. See, for example, *Naval Command and Control*, Naval Doctrine Publication 6, Washington, DC: Department of the Navy, May 19, 1995, p. 35.

24. For a discussion of some of the considerations an MNFC must face when forming his force, see Palin, *Multinational Military Forces*, pp. 31-51.

25. For an assessment of the problem of mission instability, see "Mission Creep Study," *Multinational Force Command Authorities Handbook*, Section VIII, pp. 51-59.

26. This point is strongly and convincingly made in *FM 100-7*, p. 2-8.

27. For an explanation of command issues in Desert Shield, see Jeffrey McCausland, "The Gulf Conflict: A Military Analysis," *Adelphi Paper* No. 282, London: The International Institute for Strategic Studies, November 1993, pp. 15-17.

28. This point was a key conclusion in the proceedings of the CR-CAST working group on command authorities. See *Multinational Force Command Authorities Handbook*, points 3.2 and 3.3.

29. The hypothetical phasing employed here is taken from *Multinational Force Command Authorities Handbook*, because that study provides a breakdown of tasks. It is important to note, however, that there is no agreement between U.S. and Allied phases of operation planning. In *Allied Joint Operations Doctrine, AJP-1(A)*, 2nd Preliminary Draft, pp. 2-3 thru 2-4, the planning phases listed are:

- a. Development of a campaign plan.
- b. Force preparation, including build-up, assembly and pre-mission training.
- c. Deployment to the area of operations or the reinforcement of in-place forces.
- d. Staging in the theater of operations.
- e. Build-up of logistic support and host nation support.
- f. Deployment for combat operations or operations other than war.
- g. Execution of operations.
- h. Post-operation, conflict termination and military post-conflict activities.
- i. Redeployment of forces.

In U.S. joint doctrine, *Doctrine for Joint Operations, Joint Pub 3-0*, Washington, DC: Joint Chiefs of Staff, February 1, 1995, pp. III-18 through III-19, phases are defined as:

- a. prehostilities,
- b. lodgment,
- c. decisive combat and stabilization,
- d. follow through,
- e. posthostilities and redeployment.

30. For a list of tasks associated with a self-defense mission, see *Multinational Force Command Authorities Handbook*, Annex D, pp. 25-26.

31. For a list of tasks associated with Peace Support Operations see *ibid.*, Annex E, pp. 27-28. For a list of tasks related to a particular Peace Support mission see, *ibid.*, "Appendix to Annex E", pp. 29-30.

32. For greater explanation on this issue refer to the " 'Mission Creep' Study."

33. For an excellent review of coalition ROE issues as related to UNITAF/UNOSOM, see F. M. Lorenz, "Law and Anarchy in Somalia," *Parameters*, Vol. 23, No. 4, Winter 1993-94, pp. 27-41.

34. See *The New York Times*, April 8, 1994.

35. See *FM 100-7*, pp. 2-14 through 2-17; and particularly *FM 100-8*, pp. 2-1 through 2-5.

36. See *The Washington Post*, November 9, 1995 and November 29, 1995; and, *International Herald Tribune* (Paris), May 10, 1996.

37. "Since no single command structure fits the needs of all alliances and coalitions, several different models could evolve." See *FM 100-8*, p. 2-1.

38. For an assessment of recent U.S. experience with command structures in Peace Support Operations, see David S. Alberts and Richard Hayes, *Command Arrangements for Peace Operations*, Washington, DC: The Institute for National Strategic Studies, National Defense University, May 1995, pp. 41-75.

39. Moreover, the key link between these two commands was the Coalition Coordination, Communication and Integration Cell created by General Schwarzkopf. See McCausland, p. 16.

40. See Diego Ruiz Palmer, "De Metz a Creil: les structures de commandement francaises de l'apres-guerre froide," Paris: CREST-Ecole polytechnique, October 1995, p. 2.

41. See *The New York Times*, January 17, 1990.

CHAPTER 3

THE EFFECT OF TECHNOLOGICAL ASYMMETRY ON COALITION OPERATIONS

Steven Metz

Overview.

Americans have an infatuation with technology so deep that it borders on obsession. This has deep roots in history. As the United States grew and matured throughout the 19th century, the rapid expansion of the frontier led to persistent labor shortages. Technology, by substituting machinery for human muscle, offered a partial solution. What began, then, as a practical reaction to an economic problem eventually had a profound impact on national perceptions and attitudes. Today, the belief that technology can solve social, economic, or even political problems is ingrained. Americans reach for technology as an instinctive reaction to a whole range of dilemmas.

This trust in the curative power of technology has been a major influence on American thinking about national security. Key elements of the American *weltanschauung*—the high value of individual life, an inward-looking orientation, and a willingness, albeit a reluctant one, to accept global responsibility—have led to a great demand for economy in American strategy, particularly an economy of blood. The stress on technology in American defense policy must be seen in this context. Qualitative superiority—of which technology is an important part—allows the U.S. military to meet the nation's many global security commitments with the smallest possible force, deter aggression through strength, and limit casualties when deterrence fails and force becomes necessary. Given the strategic situation that the United States currently faces with its combination of widespread responsibilities and the need to retain public support by minimizing costs, trust in technology is a logical and pragmatic reaction.

Today, the connection between technology and security is codified in American strategy. For instance, the 1992 *National Military Strategy of the United States* stated, "advancement in...technology is a national security obligation."¹ While the 1995 version of the national military strategy dropped this phrase, nearly all the current programs and activities of the U.S. Department of Defense remain premised on technological superiority (however defined). "[W]e will continue," stated Undersecretary of Defense Paul G. Kaminski, "to maintain technological supremacy on the battlefield. . . . Our forces are being designed to achieve dominant battlefield awareness and combat superiority through the deployment of fully integrated intelligence systems and technologically superior weapons systems."² This is not empty rhetoric. Programs are underway to build concepts, doctrine, and force structure to make maximum use of emerging technology including the Army's Force XXI and Army After Next Project, the Air Force's Spacecast, and the Marine Corps' Project Sea Dragon.³

If the acquisition and fielding of advanced technology were the only requirements of U.S. national security strategy, the lives of American policymakers would be much easier. But strategy is always an uneasy compromise between competing needs and demands. For instance, the ability to operate with coalition partners is equally vital. According to General John M. Shalikashvili, "Although our Armed Forces will maintain decisive unilateral strength, we expect to work in concert with allied and coalition forces in nearly all of our future operations, and increasingly, our procedures, programs, and planning must recognize this reality."⁴ This is a traditional theme in American strategy and, like the stress on technology, is a pragmatic response to pressing problems. Coalitions stretch defense resources and spread costs among the participants. A well-designed and well-led coalition blends the skills of its component forces to make the whole greater than the sum of the parts. Coalitions can also bring political and strategic benefits such as an increased ability to mobilize and sustain public support.

Despite the trends toward increasing use of technology and coalitions, the two are not always perfectly compatible. Under some circumstances, the quest for technological superiority can erode the effectiveness of coalitions. As a general rule, the greater the similarity between military forces, the easier it is for them to work together. Technology can create major differences between the techniques, capabilities, preferences, doctrine, and force structure of coalition partners. To ensure that technological differences do not erode the effectiveness of a coalition requires deliberate effort and well-designed programs. In the current global security environment, this should be a high priority for American military leaders and strategic planners, and for the leaders of other militaries who anticipate operating in coalition with the United States.

Framing the Issue.

Taken alone, the type or amount of technology that a military force possesses does not determine whether it can operate effectively with any other. *Technological asymmetry* between coalition partners is the key variable. When assessing technological asymmetry, it is easy to fall into a mental trap and conclude that some coalition partners are "more advanced" or "superior" to others with the implication that the "backward" partners must be brought up to the level of the more advanced. Such notions attach distracting value assessments and assume a rigidly linear pattern of technological development. Reality is more complex.

From the perspective of political decisionmakers and military strategists building a coalition, it is more useful to think in terms of three types of technological asymmetry. The first is when coalition partners have a different degree of reliance on technology. Some militaries may be unable to perform basic functions such as planning, movement, and target acquisition without complex technology, while others are less dependent. A second type of asymmetry arises when coalition partners rely equally on complex technology but utilize different forms. For instance, the U.S. military is

now exploring nonlethal weapons such as low-energy laser weapons, isotropic radiators, non-nuclear electromagnetic pulses, high-power microwaves, infrasound, liquid metal embrittlement, supercaustics, anti-traction technology, polymer agents, combustion alteration technology, calumative agents, and visual stimulus and illusion technologies.⁵ While eventually many of these will be rejected as impractical, illegal, or unethical, some have or will be integrated into the arsenal of the U.S. military. To make use of them, the U.S. Department of Defense is developing doctrine, procedures, and strategy. It is certainly logical to use new technology to meet the demands of a security environment which demands a minimum human cost in the application of military force. But nonlethal weapons could generate complications for future coalitions. It is easy to imagine a peace support coalition a few years from now where the U.S. component makes great use of nonlethal weapons while other coalition partners do not, thus creating considerable planning and execution problems for the force commander. A third variant of technological asymmetry arises when coalition partners, equally reliant on similar technology, use it for different purposes. For example, two partners might both have advanced nonlethal weapons, but one might use them strictly for force protection and rear area security while the other uses them in conjunction with lethal fires during offensive operations (e.g., to immobilize armored vehicles or enemy soldiers before destroying them with conventional fires).

Of course, asymmetries of one kind or another have affected military coalitions throughout history, but they are a mounting problem in the contemporary strategic environment. This is particularly true of technological asymmetry. In an absolute sense, the range of available military technology is wider than ever; its development continues unabated, particularly in the United States. In fact, some analysts argue that a technological revolution is underway that will further add to the gap between armed forces that master it and those who do not.⁶ This carries

profound implications for the commanders and architects of future coalitions.

The military-technical revolution, or revolution in military affairs, promises to alter all dimensions of military activity from the tactical to the strategic. At the tactical level, scientists, engineers, and military planners are designing new technologies to supplement human capabilities and make the soldier an integrated sensor system and strike platform.⁷ This has spawned a number of programs. The U.S. Army's Project Land Warrior, for instance, is blending advanced communications, new weapons systems, and an array of defenses to augment the capabilities of dismounted soldiers.⁸ The high-tech headgear of future soldiers will include audio-visual communications, eye protection from tunable laser and ballistic injuries, night vision, respiratory and auditory protection, chemical and biological protection, and a heads-up display with a weapons interface.⁹ Project Land Warrior is one part of the broader and more ambitious Force XXI Program. This is designed to develop the doctrine, concepts and organizations to make maximum use of new technologies, especially those based on digital information.¹⁰ Some parts of the Force XXI Army are far along in the development process. Elements of what is being called the "digitized" U.S. Army of the next century have been field tested in exercises where scouts are equipped with the Dismounted Digitized Soldier System which enables spot reports and instructions to be sent to lower and higher echelons within seconds without voice communication.¹¹

Emerging technology promises even more profound change in coming decades. The rapidly developing technology of command, control, communication, and intelligence (C³I), in conjunction with high-technology training using simulations, promises to give advanced militaries the ability to find and strike targets over long distances, synchronize highly complex operations, and operate at a much faster pace than previously possible. Optimists hold that technology may soon provide military

commanders a near-perfect picture of the battlefield with the ability to know where all friendly and most enemy forces are at any given time and, more importantly, to truly understand what is happening across the battlefield.¹² Eventually the integration of advanced C³I technology, new doctrine, and new force structures may allow a radical alteration of the basic design of the battlefield with commanders hundreds or even thousands of miles away from subordinate units still able to retain effective tactical control. Rather than the traditional linear architecture with clearly defined fronts, the future battlefield may see small, networked units operating in a nonlinear fashion, each acting semi-autonomously but contributing to the attainment of common goals in super fast-paced and tightly synchronized operations. As Barry R. Schneider phrased it, Desert Storm-type operations may give way to a "Dispersed Storm."¹³ Some analysts are already talking of chaos theory, fuzzy logic, and other forms of nonlinear thinking replacing linear, Newtonian logic as the foundation for 21st century military operations.¹⁴

Even today, emerging technology is opening the way for profound changes in operational concepts. According to General John Shalikashvili:

By 2010, we should be able to change how we conduct the most intense joint operations. Instead of relying on massed forces and sequential operations, we will achieve massed effects in other ways. Information superiority and advances in technology will enable us to achieve the desired effects through the tailored application of joint combat power. Higher lethality weapons will allow us to conduct attacks concurrently that formerly required massed assets, applied in a sequential manner.¹⁵

By 2020, all operations by military forces which have integrated the latest technology may reflect concepts such as "pop up" warfare where strike platforms are hidden and quiet except during engagement or movement, or "fire ant warfare" where large numbers of small, relatively cheap, unmanned weapons platforms swarm on enemy targets.¹⁶

Stealth and the technology associated with precision, stand-off weapons systems already allow the United States and some other nations to strike with near-impunity against all but the most advanced opponents. The same technologies, in conjunction with ongoing improvements in force protection, whether missile, nuclear, biological, and chemical (NBC) defenses or individual soldier protection, will probably decrease the risk to the soldiers, marines, sailors, and airmen of those states that develop and implement them. Robots and other unmanned "brilliant" systems will increasingly assume the most dangerous battlefield tasks. This is already underway in mine clearing and reconnaissance, but eventually unmanned systems may take over nearly all close engagements. As a technology forecast prepared for the U.S. Army stated, "The core weapon of twentieth-century land war has been the tank, but the core weapons of the twenty-first century many be unmanned systems, operating mostly under computer control."¹⁷ Already, technology is making possible the "deconstruction" of weapons systems where the sensor, system controller, and the strike platform itself are physically dispersed, thus making it extremely difficult for an opponent to locate the human directing the system.¹⁸ Advances in information warfare may allow military forces to erode the effectiveness of an opponent electronically, thus rendering the application of traditional force much easier or, in the most optimistic scenarios, irrelevant.¹⁹ It may no longer be necessary to destroy the armed forces or industry of an enemy or even to seize territory, but only to demolish the enemy's command and communication system from afar using nonlethal means. Added to other forms of nonlethal weapons, information warfare has the potential to make "dirty" combat based on killing and physical destruction obsolete.

If all this technology matures and is fielded by the United States and others, it is easy to imagine how difficult it would be to forge a coalition combining some partners which have adopted the new forms of warfare and others which continue to rely on traditional techniques. Even today, the gap between armed forces pursuing new

things such as communications systems than it was to solve major differences. When obvious technological asymmetries exist in a coalition, the participant rich in technology often assumes responsibility for transcending or bypassing the problems which emerge from the gap. When the asymmetries are important but not glaring, it is more difficult to assign responsibility for overcoming them.

The second factor determining the danger that technological asymmetry might pose to a coalition is the period of time between the deployment of forces and the commencement of operations. The more time available, the greater the chances that solutions can be found for the most debilitating asymmetries. Third is the intensity and pace of the operations the coalition will undertake. The more intense and fast-paced the operations, the greater the danger that technological asymmetry will complicate or prevent completion of key strategic and operational tasks. History is replete with instances where asymmetries—some technological and some related to training and leadership—forced a coalition to act more slowly than the commander would have wished. Examples include Rommel's experience with the Italians or von Manstein's with the Rumanians. The fourth factor is the technology of the enemy. A technologically proficient enemy will be better able to identify and manipulate technological asymmetries in a coalition. The fifth factor is the political strength or fragility of the coalition. A warfighting coalition where the national survival or vital interests of the participants are at stake will be more likely to take difficult steps to overcome technological asymmetry or to bear its costs than a more fragile coalition where participants will withdraw if the costs and risks of the operation exceed fairly low limits. Taken together, these factors allow coalition planners to develop an overall assessment of risks posed by asymmetry. Such an assessment should be a standard part of planning for contemporary military coalitions.

Problems.

Technological asymmetry can generate problems for coalitions both in terms of support and the employment of forces. A coalition commander whose force is riven with such asymmetries may be forced to use his assets in a way that increases risks and diminishes the probability of success. This can happen in several ways. At the most basic level, technological asymmetry can complicate or prevent effective interoperability by hindering coordination between units from different nations and increasing the coalition's logistics, maintenance and support burden by forcing it to store and move a wider range of material. But, at the same time, technology also provides help with the complexities of managing an extensive inventory of supplies, parts, and other materiel. More serious problems can arise when a coalition commander must shape his concept of operations to the capabilities of the partner that had done the least to acquire and field the technology necessary for fast-paced, complex operations. While slower and simpler operations are not always inferior, anything that limits the choices available to a commander has the potential to complicate the completion of key missions or to increase risk and cost.

Technological asymmetry can also generate strategic level effects that threaten alliance cohesion, primarily by creating a perception of unequal burden-sharing or risk among the participants. For instance, if some militaries develop and field advanced technology for soldier protection and then join a coalition with partners lacking it, the coalition commander would have three options. He could ignore the asymmetry and hope that the coalition partners without soldier protection technology do not abandon the cause when their casualties exceed those of partners which do have such technology. He could design the operation so that coalition partners with advanced soldier protection technology assumed the most dangerous roles. Or he could attempt to have the nations with advanced soldier protection technology share it with those lacking it, thus increasing the risk of casualties for the nations which gave

up the equipment and boosting the chances that their publics might demand withdrawal from the coalition. Clearly, none of these is desirable.

Technological asymmetry, then, can generate a range of problems for a coalition from the tactical to the strategic levels. Many of these are extraordinarily complex, with the same technology that augments military capabilities sometimes generating new dilemmas.

Solutions.

Specific solutions to technological asymmetry, whether operational or strategic, will naturally depend on the circumstances. The political mandate of the coalition, its military mission, composition, and enemy all determine to what extent and in what ways a commander handles internal technological differences. It is possible, though, to sketch some general approaches to asymmetry that political leaders, coalition commanders, and planning staffs might consider. These approaches fall into three categories: (1) activities prior to forming a coalition; (2) activities during the diplomatic activities associated with the formation of a coalition; and, (3) activities during the planning and execution of coalition military operations.

Prior to forming a coalition. While it is impossible to fully prevent technological asymmetries among coalition partners, it is both possible and important to keep them from becoming debilitating or posing an obstacle to the accomplishment of key missions. This can best be done in advance of the formation of a coalition. Because the United States will often assume the role of lead nation in future multinational coalitions, the Office of the Secretary of Defense, the Joint Staff, and the regional unified commands should pay particular attention to establishing a conceptual and doctrinal framework for dealing with technological asymmetries. Each of the regional unified commands, for instance, should develop long-term programs to assess the asymmetries that exist between the United States and potential coalition partners in their area. The unified

commands (especially Atlantic Command) and the services should develop exercises, simulations, and wargames designed specifically to identify the most dangerous forms of technological asymmetry in existing and future military forces. This will require U.S. planning staffs such as the Joint Staff, the service staffs, and the J-5 sections of the regional unified commands to pay particular attention to any long-term, future-oriented force development programs implemented by potential coalition partners. At the same time, historical studies should be undertaken to develop a data base of responses to asymmetries that have been used in the past. And, officers who might someday command a coalition or work on a high-level coalition staff should be made aware of the effects of technological inequality and possible solutions. To facilitate this, the various U.S. war colleges should incorporate the study of the problems associated with coalition operations into their curricula and wargames (if this has not already been done).

As appropriate concepts and attitudes are developed to alleviate or forestall the debilitating effects of technological asymmetry, nations which might play a central role in future coalitions—again with the United States in the lead—should move toward more concrete programs. Under certain conditions, technology sharing might prove useful. Most often, though, this option will only work with fairly simple things such as communications equipment. Recent conflicts such as the Gulf War showed that possession of complex technology alone does not always lead to dramatic improvements in military effectiveness. Technology is simply one part of a synergistic system that includes research, development, training, doctrine, support systems, concepts, attitudes and leadership. Given this, sharing technology with potential coalition partners will not help unless the other components of the system can also be exported and absorbed by the recipient. Many military forces are simply not capable of undertaking the rapid and radical change in training, force structure, and doctrine that new, complex technology requires. In the future, the information revolution may create technologically savvy subcultures in all states from which military leadership can

be drawn. Today, though, only military forces of technologically-focused cultures like the American, Japanese, German, and a few others can do this. For most, complex or strange technology would be under-utilized and money better spent on simpler but more usable equipment.

There are also political problems with technology sharing. States with complex technology will often hesitate to share it with potential coalition partners. With allies, there is some expectation of continued cooperation and a foundation of shared interests, so technology sharing is politically feasible. But this does not always hold in a security environment where it is difficult to predict future friends and enemies, and where *ad hoc* coalitions are the rule. There is always the risk that shared technology will be turned against its originators or transferred to a third party. Because of this, the focus of any programs to forestall debilitating technological asymmetry should be on procedural solutions rather than technology sharing.

During the formation of a coalition. During the actual process of forming a coalition, the nature of the mission and the enemy or threat become clearer, so potentially damaging technological asymmetries can be identified with greater certainty. At this stage, military planners and advisers must make the architects of the coalition aware of such asymmetries as civilian leaders balance the political advantages of including as many partners as possible in a coalition against the cost in military effectiveness that can arise in an asymmetric force. Political leaders must be open to the idea of rejecting a potential partner when the military disadvantages of participation greatly outweigh the political gains. If political leaders do decide to include a military force that adds technological asymmetry to a coalition, they should consider specifying a role that minimizes the degree to which that partner erodes military effectiveness and limits the choices available to the coalition commander. In general, technology is most crucial for C³I and offensive operations. Military strategists should advise political leaders to seek a contribution outside these areas

from states that have done a less comprehensive job at integrating the latest technology.

During planning and execution. Once a coalition is formed and operational planning begins, the role of the coalition commander and his staff in dealing with technological asymmetry increases. The objective is still to balance military effectiveness with the political objectives and parameters of the coalition. In less risky and dangerous operations or where a coalition is particularly fragile, the commander may decide that political conditions justify accepting reduced effectiveness and shape the operation according to the least proficient coalition partner. The result would be a plan of operation that unfolds more slowly and is less complex than one that might be undertaken by a coalition composed solely of more technology-reliant partners. Under some conditions, this may provide an advantage to the adversary.

In peace enforcement or warfighting where the dangers and risks are greater, a coalition commander is less likely to allow the limitations of the least capable partner to dictate activities and will, instead, seek ways to transcend any debilitating technological asymmetries. In a broad sense, there are two ways to do this. The commander can attempt to ameliorate asymmetries by improving the capabilities of coalition partners which have done a less comprehensive job of acquiring and fielding technology. Again, technology sharing might seem the most obvious way of doing this, but the time it takes a military force to absorb new technology and develop the expertise to make maximum use of it diminishes the utility of technology sharing. In most instances, some sort of liaison relationship will be more fruitful. This is particularly true for the technology associated with communications and intelligence. It would be fairly simple to attach a C³I cell from more technologically proficient coalition partners to the headquarters of others. But, such a liaison system must be planned in advance. Technologically proficient coalition partners must deploy enough communications and intelligence units that some can be detached to serve as

liaisons without eroding the effectiveness of their own units. And, effective liaisons must have language and intercultural skills. Because of this, things like the U.S. Army's foreign area officer program and Special Forces will be vital to the success of future coalitions.

The second approach is to use some sort of division of labor rather than attempting to make the coalition homogenous. This could be geographic, with more technologically proficient coalition partners assigned the sectors of the battlefield where their ability to operate at a rapid tempo, strike deep, and engage a greater number of enemy targets and units would have the greatest utility. Desert Storm used this technique. But, a battlefield division of labor could also be based on tasks rather than geography, with more technologically adept coalition partners assigned jobs best suited to their skills such as battle management, intelligence, deep strike, and missile defense. Clearly, the specific approach taken will depend on circumstances, but a coalition commander aware of the advantages and disadvantages of alternative approaches to technological asymmetry will always have an advantage over one who has not considered them.

Conclusions.

How much and what kind of technology a military force acquires reflects a number of factors including available funding, the national technical and scientific base, national culture, and the strategic situation. During protracted wars, combat serves as the final arbiter of what works and what does not, so all nations, combatants and noncombatants, tend to move toward similar technology. In the current strategic environment, most military technology has not faced the ultimate test. This encourages technological heterogeneity. Each of the technologically-focused militaries around the world has its own vision of future armed conflict. This, in combination with the fact that most of the world's armed forces are not undergoing rapid technological change at the present time, contributes to an

ingrained asymmetry that will continue to grow for the foreseeable future.

Still, technological asymmetry is not always an obstacle to effective and smoothly functioning coalitions. Generally, the more intense the operations, the greater the risks posed by asymmetry while, at the same time, the greater the incentives to deal with any problems arising from it. In humanitarian relief or peace support operations, technological asymmetry will seldom generate insurmountable problems. In peace enforcement or warfighting, though, it could prove very dangerous. Political decisionmakers and coalition commanders must remain sensitive to technological differences in such situations.

As with any problem, the more that technological asymmetries can be foreseen and solutions implemented in advance, the better. While it is impossible to predict which states will join the United States in all future coalition operations, the current strategic environment does allow U.S. leaders to identify likely partners and attempt to forestall problems. This requires a coherent, long-term program which includes exercises, simulations, and wargames designed specifically to identify and find solutions to debilitating technological asymmetries. This program should help potential coalition leaders and commanders—both U.S. and foreign—understand the impact of such asymmetries on military operations in part through production and dissemination of a catalog of the types of technological asymmetries that have affected past coalitions and the solutions that commanders employed. For the United States, such a program to minimize the deleterious effects of technological asymmetry on military coalitions would be a useful step, given the persistent strategic imperatives to make maximum use of advanced technology while operating in coalition whenever possible.

ENDNOTES - CHAPTER 3

1. *National Military Strategy of the United States*, January 1992, p. 10.

2. Paul G. Kaminski, "Building a Ready Force for the 21st Century," remarks to the Huntsville, AL Chamber of Commerce, January 17, 1996, reprinted in *Defense Issues*, Vol. 11, No. 6, p. 2; and "21st Century Battlefield Dominance," remarks to the American Defense Preparedness Association and Association of the U.S. Army Symposium, Huntsville, AL, January 16, 1996, reprinted in *Defense Issues*, Vol. 11, No. 10, p. 2.

3. For information on Force XXI, see <http://204.7.227.67/f21home.html>; on Spacecast, see <http://www.au.af.mil/Spacecast/Spacecast.html>; on Sea Dragon see <http://138.156.204.100/www/cwl/cwlhome.htm#toc>.

4. John M. Shalikashvili, *Joint Vision 2010*, Washington, DC: Joint Chiefs of Staff, 1996, p. 6.

5. Paul R. Evancoe, "Non-Lethal Technologies Enhance Warrior's Punch," *National Defense*, December 1993, pp. 26-28.

6. In the early 1990s, American strategic thinkers began to talk about a "military-technical revolution." See Michael J. Mazarr, Jeffrey Shaffer, and Benjamin Ederington, *The Military Technical Revolution: A Structural Framework*, final report of the CSIS Study Group on the MTR, Washington, DC: Center for Strategic and International Studies, 1993; and Dan Gouré, "Is There a Military-Technical Revolution in America's Future?" *Washington Quarterly*, Vol. 16, No. 4, Autumn 1993, pp. 175-192. Today, the focus is on the somewhat broader concept of a revolution in military affairs (RMA). For discussion, see Steven Metz and James Kievit, *Strategy and the Revolution in Military Affairs: From Theory to Policy*, Carlisle Barracks, PA: U.S. Army War College, Strategic Studies Institute, 1995.

7. Mark Hewish and Rupert Pengelley, "Marching Into the New Millennium: Soldier-System Developments For the 21st Century," *Jane's International Defense Review*, May 1, 1996, pp. 30-38.

8. Richard J. Sterk, *Tailoring the Techno-Warrior*, Arlington, VA: Association of the United States Army, Institute of Land Warfare, June 1996, p. 1.

9. *STAR 21: Strategic Technologies for the Army of the Twenty-First Century, Special Technologies and Systems*, Washington, DC: National Academy Press, 1993, p. 21.

10. *Force XXI: America's Army of the 21st Century*, Fort Monroe, VA: Office of the Chief of Staff, Army, Director, Louisiana Maneuvers Task Force, 1995.

11. Rick Machamer, "Force XXI: Welcome to the 21st Century," *Soldiers*, April 1995, p. 39.

12. See Stuart E. Johnson and Martin C. Libicki, eds., *Dominant Battlespace Knowledge: The Winning Edge*, Fort McNair, DC: National Defense University Press, 1995.

13. Barry R. Schneider, "Principles of War for the Battlefield of the Future," in Barry R. Schneider and Lawrence E. Grinter, eds., *Battlefield of the Future: 21st Century Warfare Issues*, Maxwell AFB, AL: Air University Press, 1995, pp. 9-10.

14. Robert R. Logan, "A Complex Dragon in a Chaotic Sea: New Science For USMC Information Age Decisionmakers," Carlisle Barracks, PA: U.S. Army War College Strategic Research Paper, 1996. For an explanation of fuzzy logic, see Bart Kosko, *Fuzzy Thinking: The New Science of Fuzzy Logic*, New York: Hyperion, 1993.

15. John M. Shalikashvili, *Joint Vision 2010*, p. 11.

16. Martin C. Libicki, *The Mesh and the Net: Speculation on Armed Conflict in a Time of Free Silicon*, Fort McNair, DC: National Defense University Press, 1994, pp. 19-43.

17. *STAR 21: Strategic Technologies for the Army of the Twenty-First Century, Technology Forecast Assessments*, Washington, DC: National Academy Press, 1993, p. 112.

18. Brian Nichiporuk and Carl H. Builder, *Information Technologies and the Future of Land Warfare*, Santa Monica, CA: RAND Corporation, Arroyo Center, 1995, pp. 64-67

19. See George Stein, "Information War - Cyberwar - Netwar," and James W. McLendon, "Information Warfare: Impacts and Concerns," in Schneider and Grinter, eds., *Battlefield of the Future*; and Richard Szafranski, "A Theory of Information Warfare: Preparing for 2020," *Airpower Journal*, Vol. IX, No. 1, Spring 1995, pp. 56-65.

CHAPTER 4

DOCTRINE AND TRAINING: THE FOUNDATION OF EFFECTIVE COALITION OPERATIONS

Michael Smith

A coalition is, by definition, an *ad hoc* arrangement between two or more states for common action.¹ Its actions take place outside the bounds of established alliances, usually for single occasions, or longer cooperation in a narrow sector of common interest.² Differences in national histories, command and control procedures, logistical concepts, technological capabilities, and force compositions and organizations combine to present coalitions with imposing obstacles to effectiveness. However, the common thread among these obstacles and the greatest confounding factor coalitions face is their *ad hoc* nature.

There can be little doubt that the ability of coalitions to overcome these challenges is directly proportional to the commitment that potential coalition partners give to developing general doctrinal principles to guide their operations, and to training. No other factors hold as much potential for successful mission execution.

The Importance of Common Doctrinal Considerations.

Limited warning, limited time until execution of operations, language difficulties, and differing national cultures and defense policies add complications that would challenge even long-standing, well-trained alliances. NATO has been in existence for approximately 50 years, and, as an alliance, is a higher form of multinational organization than a coalition. Despite their long association with one another, NATO members still meet on a regular basis to develop and refine doctrinal concepts.

This underscores the doctrinal challenge facing coalitions which rarely have weeks, let alone years, to coordinate the most fundamental operational principles.³ When a military organization lacks a common doctrine it is difficult to achieve unity of effort. There may not be agreement on, or a mutual understanding of, fundamental military activities such as maneuver, mobility, counter-mobility, fire support, command and control procedures, intelligence operations (especially intelligence sharing), force protection, support operations, civil affairs, and rules of engagement.

To overcome the problems associated with the lack of a common doctrine, regional organizations should develop regional doctrinal publications which identify doctrinal "considerations" for commanders and planners. The term "considerations" is used because it is unlikely that anything more detailed or prescriptive would be adopted and endorsed by all potential coalition members from a region. Moreover, coalition partners may come from outside the region of operations and may not be inclined to adopt the regional organization's doctrine.

The publication would catalogue key considerations for commanders and planners to evaluate for applicability to their coalition's situation. It should be based on existing models (e.g., U.N., NATO, etc.) and capture the wide variety of doctrinal principles, techniques and, most important, lessons learned from previous coalitions. Such a publication would mitigate the ill effects of the *ad hoc*, limited warning, and limited time until execution nature of coalitions.

Once developed, these regional doctrine considerations could become standards, around which national forces train to prepare for coalition operations. This is critically important and would be the single most important contributor to a coalition's efficiency and effectiveness.

An inherent problem with the development of a common coalition doctrine is that some militaries view doctrine prescriptively while others view it descriptively. Regional organizations would have to determine the authority of the

doctrinal considerations they develop. Clearly the recommendation of the term "considerations" rather than actual doctrines is an attempt to address differing interpretations of the term "doctrine."

It would be wise for regional organizations to focus on operational-level doctrinal concerns. However, some explorations of tactics, techniques, and procedures will warrant the regional organization's attention.

Finally, the regions themselves must develop these considerations, or at least modify existing documents to their needs. Such an approach should make the publication much more implementable by them.

The Difficulty Posed by Shifting Objectives.

It is inherently difficult to get several different nations to agree on the objectives of coalition operations. However, an operation's objective must be clearly defined and commonly understood to attain the desired end-state.⁴ That alone is a daunting challenge. What makes this endeavor profoundly difficult is that current day operations are so complex, and the political end-state evolves or shifts as the political and military situation develops. In addition, the mission to be performed is usually a hybrid of tasks. Because the coalition did not exist prior to the crisis that spawned it, the complete composition of the coalition is unforeseeable. The coalition, quickly constituted, will not have trained together for even the most fundamental tasks. So, just when the complexity of the military situation requires flexibility, adaptability, and versatility, coalitions, which owing to their *ad hoc* nature lack a common doctrinal and training foundation, find themselves grossly unprepared for the task at hand. This is where regional doctrinal publications and training will pay off.

The Challenge of Terminology and Graphics.

Those familiar with joint operations of the U.S. military can attest to the challenges the U.S. Services face even with

one another in terms of terminology and graphics. Coalitions, normally already separated by different languages, face significant problems of differing terminology and graphics. This may undermine the goal of achieving unity of effort, and generally create confusion.

Like the doctrinal considerations publication referred to above, regional organizations need to develop and distribute a publication which standardizes the terminology and graphics a coalition would need to conduct a wide range of operations. Building on an existing publication would markedly reduce the travails associated with such an effort. This document would need to be more prescriptive than the doctrinal considerations publication. When complete, this, too, should enjoy standard use by potential coalition members in their routine training exercises.

What's in a Name?—U.N. Protection Force Bosnia.

Peace support terms are not understood well, and are markedly different between the United States, other nations, and NATO. During the U.S. Army's Battle Command Training Program's (BCTP) Peace Operations Seminar at the Allied Rapid Reaction Corps (ARRC), concerns were raised about peace support terms used throughout the workshop and in the different headquarters' operations plans. Of particular importance was the insistence of the ARRC commander and his staff that the term "enemy" does not fit in peace support operations. They sensed the term had negative political and military overtones. For the sake of graphic clarity it became necessary to develop a standard symbology for terms which applied to peacekeeping organizations and factions so they could be shown on a map. In multinational organizations, clarity and simplicity are essential in communicating the message. The following terms also generated discussion and required clarification:

- Enemy vs complying factions;

- Rules of engagement vs rules of employment;
- Lead nation;
- Role specialization;
- Mutual support;
- OPCON vs OPCOM;
- Peace support;
- Peace implementation;
- PSYOPS vs operational information.⁵

The Importance of Institutionalizing Regional Educational Exchange and Training.

Where regional organizations exist, they attest to some commonality of outlook and interests upon which military leaders can build. However, most regional organizations (with the exception of NATO and a few others) have virtually no infrastructure to support the education and training of potential coalition partners. As a result, each time a coalition is formed, there is a tremendous challenge in developing trust and confidence among coalition members, and in developing efficiency and effectiveness in military operations.

Military leaders generally recognize the need to enhance the level of interaction between potential coalition members.⁶ Senior officer dialogues, officer exchanges, education of potential liaison officers, and similar activities have been suggested as programs which would improve coordination between regional armed forces. Additionally, it would be wise for regional organizations to establish permanent or semi-permanent organizations or institutions for information exchange and interaction. Low-level events like platoon exchanges are not advisable as they are of little value in enhancing the ability to conduct coalition operations.

Training is the "center of gravity" for successful coalition operations. In order to be effective, coalition training must be based on some form of doctrine, must have standards, and should be routinely assessed to ensure compliance with stated objectives. Command Post Exercises (CPXs) are the overwhelming training vehicle of choice. This is largely due to the requirement of coalition operations to solve inter-armed forces integration challenges. Most of these challenges center on the actions of commanders and planners at higher echelons. Field Training Exercises (FTXs) which are extremely expensive and resource intensive, do little to address the challenges that most coalitions face.

**Doctrine and Training: Challenges and Solutions
for Lack of Common Doctrine and Training . . .
UNOSOM II (1993).**

Approximately 9,000 U.S. military personnel participated as part of the multinational United Nations force of about 28,000 peace enforcement troops from 29 nations in the U.N. operation in Somalia (UNOSOM II).

UNOSOM II followed the UNOSOM mission of 1992 and the formal deployment of U.S. military personnel to Somalia in December 1992 (UNITAF). The overall commander was a Turkish general who was assisted by a U.S. deputy. This coalition, in some measure, faced every challenge mentioned in this chapter.

The planning and conduct of combined operations was adversely affected by the organization of UNOSOM headquarters and the differences in training and doctrine among national contingents. The UNOSOM II headquarters was staffed in accordance with the traditional U.N. model of determining staff positions based on national contributions rather than with an eye toward optimizing staff performance. The staff was composed of more than 20 of the participating nations, and was assembled "on the ground" in Mogadishu over the course of 4 months. On May 4, 1993, when UNOSOM assumed control of operations in

Somalia, less than 25 percent of the staff had arrived in theater.

To ameliorate the problems of planning in a multinational headquarters, the United States placed its staff officers in many key positions. To avoid the impression of U.S. domination, staff section heads were provided by other major participants, but the deputies were U.S. officers. The U3 plans cell was dominated by U.S. officers. As a result, UNOSOM II was able to follow U.S. procedures in the command estimate process to great effect. While there was concern about causing friction within the staff or within the coalition because of the appearance of the United States dominating the UNOSOM staff, any adverse impact was eventually overcome. Despite all of this, the conduct of planning and execution remained at an unacceptable level because it did not solve the problem of effectively communicating orders to subordinate headquarters.

Although contingents from NATO nations brought a high level of staff training and compatible procedures, and the officers of many nations proved to be highly professional, the significant disparity in training and doctrine among other participants made the planning process slower and more complicated than the situation required. First, planners had to determine what various contingents were *capable* of doing before assigning missions. Second, negotiations were conducted to determine what various contingents were *willing* to do based on guidance from their national capitals or the views of the contingent commanders.

Each nation providing military forces to Somalia under the U.N. Charter placed certain restrictions on their forces (to include the United States). These restrictions, combined with differing views on basic military doctrine required the UNOSOM II staff to consult extensively with national contingents in an effort to build consensus for a proposed military action, a task that many military staff officers were not accustomed to performing. While such efforts slowed the planning process, failure to do so produced orders that resulted in little action being accomplished.

To complicate matters further, many coalition forces did not recognize or accept the concept of "implied" tasks in an order, thus requiring UNOSOM II planners to "specify" all tasks in orders to subordinate units. This was not initially well-understood by U.S. officers on the UNOSOM II staff, and they prepared operational orders in the style and format used by the U.S. Army. Over time, orders became much more detailed and specific.

Although English was the official language of UNOSOM II, language barriers within the UNOSOM II staff as well as between UNOSOM II headquarters and national contingents made planning and execution of combined operations much more difficult. U.S. doctrinal terms were not universally accepted or even understood, and when combined with basic language problems, made translation of the commander's intent a difficult challenge. Language barriers, combined with a heavy reliance on interpreters and liaison officers to pass command information, resulted in critical information being filtered and portions invariably lost. To overcome this problem, U.S. staff officers had to limit their reliance on U.S. doctrinal terms and make extensive use of the "briefback" process, in which contingent commanders briefed their understanding of the orders back to the UNOSOM II staff.

Though there is no substitute for clear commander-to-commander communication in a combat operation, the provision of high quality liaison officers from national contingents to the UNOSOM II staff was very important to the success of combined operations during both the planning process and subsequent execution. Fortunately, nations uniformly provided talented officers with the best available English ability as liaison officers. During combined combat operations controlled by UNOSOM headquarters, they were present in the Joint Operations Center and were an invaluable asset in promoting clear understanding of orders and units' requirements.

A Final Word.

The international system of today and the foreseeable future is characterized by the preeminence of the United States. Despite its strength and military capabilities, the United States has repeatedly demonstrated its desire to defer to regional organizations to solve regional problems. When it senses its involvement is required, the United States, as a matter of policy, will normally seek the assistance of other countries. Most of the countries and regional organizations of the world have arrived at the same conclusion regarding the importance of regional coalitions. The Organization for African Unity (OAU) has brokered sub-regional coalition responses to conflicts throughout the continent. Its interactions with the members of the Economic Community of West African States (ECOWAS) led to deployments of armed forces in Liberia, Rwanda, and elsewhere. Even the newly reorganized Republic of South Africa has adopted policies which embrace the notion of forming regional military organizations to assist in solving regional and extra-regional conflicts.

This penchant for regional solutions and coalitions is also present in South America, where Rio Protocol countries organized a force to respond to the 1995 Peru-Ecuador border dispute. Likewise in Asia, the Association of Southeastern Asian Nations (ASEAN) now-routine discussions of regional military interactions provide additional examples.

However, articulating a common objective, achieving unity of effort, and directing and coordinating all forces toward the common objective, is very difficult.⁷ History provides examples of possible solutions, but each operation and coalition is different. As a result, achieving unity of effort overarches each coalition's conduct of operations.

The challenges posed by differences in national cultures and histories, command and control procedures, logistical concepts, technological capabilities, force compositions and organizations, and doctrine and training all relate to one another in coalition operations. Some factors cannot be

changed—they are inherent to multinational coalitions. But doctrine and training can be developed and modified, and hold the most promise to improve the efficiency and effectiveness of coalition operations. Publication of regional coalition doctrine considerations, common terminology, and institutionalized training and exchange for coalition operations would be significant steps to improve such operations. Implementation of these steps would enhance the chance for successful missions, and would most assuredly save lives.

ENDNOTES - CHAPTER 4

1. Joint Publication 3-16 (Second Draft), *Joint Doctrine for Multinational Operations*, Chairman, Joint Chiefs of Staff, April 25, 1996, p. GL-4.

2. *Ibid.*

3. A possible exception is Operation Desert Storm. The coalition succeeded largely because a key challenge that most coalitions face was absent—time until execution of the operation. The coalition had six months to prepare. In this case, military professionals from throughout the coalition took advantage of the time they had to forge what came to be the most effective coalition in the history of warfare.

4. Field Manual 100-8 (Draft), *The Army in Multinational Operations*, Headquarters, Department of the Army, April 29, 1996, p. 1-2.

5. (Draft), Initial Impressions Lessons Learned Report, U.S. Army Center for Army Lessons Learned, February 1995, p IX-11.

6. Conferences, *Workshop on Problems and Solutions in Future Coalition Operations*, Headquarters, U.S. Army Europe, April and June 1996.

7. Field Manual 100-8 (Draft), p. GL-13.

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